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Canada Parliament. House of Commons  
Special Committee  
on defence expenditures.  
Minutes of proceedings and  
evidence



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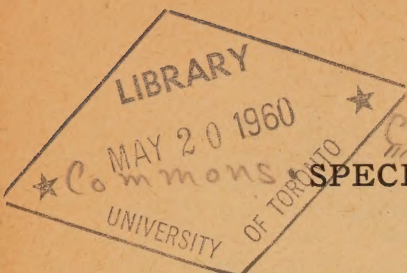




HOUSE OF COMMONS

Third Session—Twenty-fourth Parliament

1960



SPECIAL COMMITTEE

ON

# DEFENCE EXPENDITURES

(Chairman: Mr. G. E. HALPENNY)

## MINUTES OF PROCEEDINGS AND EVIDENCE

No. 1 - 27

1960

TUESDAY, MAY 3, 1960

WEDNESDAY, MAY 11, 1960

Expenditures of National Defence for the Fiscal Year

1958-59

### WITNESSES:

The Honourable George R. Pearkes, Minister of National Defence; Mr.  
F. R. Miller, Deputy Minister.

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SPECIAL COMMITTEE  
ON  
DEFENCE EXPENDITURES

Chairman: Mr. G. E. Halpenny  
Vice-Chairman: Mr. Roger Parizeau

and Messrs.

Baldwin,  
Carter,  
Chambers,  
Fairfield,  
Forgeie,

Hellyer,  
Lambert,  
MacEwan,  
Pratt,  
Roberge,

Smith (*Calgary South*),  
Webster,  
Winch.

Antoine Chassé,  
Clerk of the Committee.



## ORDERS OF REFERENCE

HOUSE OF COMMONS,  
FRIDAY, March 18, 1960.

*Resolved*,—That a special committee be appointed to examine all expenditure of public moneys for national defence and all commitments for expenditure for national defence since April 1st, 1958, as reported in Public Accounts, and to report from time to time their observations and opinions thereon, and in particular what, if any, economies consistent with the execution of the policy decided by the government may be effected therein, with power to send for persons, papers and records and to examine witnesses; and that in accordance with Standing Order 67, the committee shall consist of not more than fifteen (15) members to be designated by the House at a later date.

MONDAY, May 2, 1960.

*Ordered*,—That the Special Committee on Defence Expenditures, appointed on March 18, 1960, be composed of Messrs. Baldwin, Carter, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Lambert, MacEwan, Parizeau, Pratt, Roberge, Smith (*Calgary South*), Webster, and Winch.

*Ordered*,—That Items numbered 217 to 237 inclusive, as listed in the Main Estimates of 1960-61, relating to the Department of National Defence, be withdrawn from the Committee of Supply and referred to the Special Committee on Defence Expenditures, saving always the powers of the Committee of Supply in relation to the voting of public moneys.

*Ordered*,—That Items numbered 66 to 74 inclusive, as listed in the Main Estimates of 1960-61, relating to the Department of Defence Production, be withdrawn from the Committee of Supply and referred to the Special Committee on Defence Expenditures, saving always the powers of the Committee of Supply in relation to the voting of public moneys.

TUESDAY, May 3, 1960.

*Ordered*,—That the Special Committee on Defence Expenditures be authorized to sit while the House is sitting; and that it be authorized to print such papers and evidence as may be ordered by the Committee, and that Standing Order 66 be suspended in relation thereto.

Attest.

L.-J. RAYMOND,  
*Clerk of the House.*





## REPORT TO THE HOUSE

TUESDAY, May 3, 1960.

The Special Committee on Defence Expenditures has the honour to present its

### FIRST REPORT

Your Committee recommends:

1. That it be authorized to sit while the House is sitting.
2. That it be authorized to print such papers and evidence as may be ordered by the Committee, and that Standing Order 66 be suspended in relation thereto.

Respectfully submitted,

G. E. HALPENNY,  
*Chairman.*

NOTE: *The said report was concurred in on the same day.*



## MINUTES OF PROCEEDINGS

The Senate, Room 356-S.

TUESDAY, May 3, 1960.

(1)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m.

*Members present:* Messrs. Baldwin, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Lambert, MacEwan, Parizeau, Roberge, Smith (*Calgary South*), Winch—12.

The Clerk of the Committee attended the election of a Chairman.

Mr. Smith (*Calgary South*) moved, seconded by Mr. Fairfield, that Mr. Halpenny be elected Chairman.

On motion of Mr. Chambers, seconded by Mr. Lambert, nominations closed.

And the question having been put on the proposed motion of Mr. Smith (*Calgary South*), it was unanimously agreed to.

Mr. Halpenny took the chair.

The Chairman invited nominations for the appointment of a Vice-Chairman.

Mr. Lambert moved, seconded by Mr. MacEwan, that Mr. Parizeau be elected Vice-Chairman.

On motion of Mr. Smith (*Calgary South*), seconded by Mr. Fairfield, nominations closed.

And the question having been put on the proposed motion of Mr. Lambert, it was unanimously agreed to.

On motion of Mr. Fairfield, seconded by Mr. Smith (*Calgary South*),

*Resolved*,—That the Committee seek authorization to sit while the House is sitting.

On motion of Mr. Winch, seconded by Mr. Hellyer,

*Resolved*,—That the Committee seek authorization to print such papers and evidence as may be ordered by the Committee.

On motion of Mr. Winch, seconded by Mr. Fairfield,

*Resolved*,—That the Chairman and four other Members of the Committee, to be designated by the Chairman, act as a Subcommittee on Agenda and Procedure.

Future sittings were discussed. After many suggestions, it was agreed that the question of hours and days of sittings be referred to the Subcommittee on Agenda and Procedure for consideration and recommendation to the Committee.

At 9.45 o'clock a.m. the Committee adjourned to the call of the Chair.



House of Commons,  
Room 238-S,

WEDNESDAY, May 11, 1960.  
(2)

The Committee met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Lambert, Parizeau, Roberge, Smith (*Calgary South*), Winch—12.

*In attendance:* Honourable George R. Pearkes, Minister of National Defence; Mr. F. R. Miller, Deputy Minister; Mr. E. Armstrong, Assistant Deputy Minister (Finance); and Mr. D. B. Dwyer, Superintendent, Parliamentary Returns.

At the commencement of the proceedings the Chairman read the following report of the Subcommittee on Agenda and Procedure:

The Subcommittee on Agenda and Procedure, to which the Chairman designated Messrs. Hellyer, Fairfield, Smith (*Calgary South*), and Winch act with him, met on Tuesday, May 3rd, at 4.30 o'clock p.m.

All members of the said Subcommittee attended.

After discussion, the following decisions were agreed to and are recommended for adoption by the Committee:

1. That the Committee meet every Wednesday and Friday at 9.30 o'clock a.m.
2. That the Committee proceed first with a review of expenditures of 1958-59 as reported in the Public Accounts and follow-up with a study of the 1960-61 Estimates.
3. That the witnesses to be called at the start be restricted to the Minister and the Department officials.
4. That pursuant to authority granted by Order of Reference of Tuesday, May 3rd, 1960, the Committee print, from day to day, 750 copies in English and 250 copies in French of its Minutes of Proceedings and Evidence and such papers as the Committee may order.

Respectfully submitted,

G. E. HALPENNY,  
*Chairman.*

Mr. Winch moved, seconded by Mr. Hellyer,

That the order of business proposed in paragraph 2 of the said Report be reversed, that is, Estimates 1960-61 be considered first and that expenditures 1958-59 follow.

And the question having been put on the proposed motion of Mr. Winch it was, on a recorded vote, resolved in the negative on the following division: Yeas,—Carter, Forgie, Hellyer, Winch—4; Nays,—Baldwin, Chambers, Fairfield, Lambert, Parizeau, Smith (*Calgary South*),—6.

Mr. Smith (*Calgary South*), moved, seconded by Mr. Lambert,

That an addition be made to the third paragraph of the said Report as follows:

That the Subcommittee will receive, consider and report on any suggestions by Members of the Committee as to other witnesses to be called.

And the question having been put on the proposed motion of Mr. Smith (*Calgary South*), it was, on a show of hands, resolved in the affirmative.

On motion of Mr. Winch, seconded by Mr. Lambert, the said Report, as amended, was adopted.

The Chairman introduced the Minister of National Defence, Honourable George R. Pearkes. The Minister submitted for the consideration of the Committee a financial summary showing actual expenditures of National Defence for the fiscal years 1955-56, 1956-57, 1957-58 and comparison between estimate and actual Expenditure 1958-59 with a breakdown of these for Navy, Army and Air Force, Defence Research Board, Inspection Service and Mutual Aid and others.

It was agreed that the said financial summary be printed as appendix to today's record of Proceeding and Evidence. (*See Appendix "A"*).

Mr. Pearkes made brief comments on the financial summary and he and Mr. Miller were questioned thereon.

At 11.00 o'clock a.m. the Committee adjourned to meet again at 9.30 o'clock a.m. Friday, May 13, 1960.

Antoine Chassé,  
*Clerk of the Committee.*





## EVIDENCE

WEDNESDAY, May 11, 1960.  
9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

At this time I would like to read a report of the steering subcommittee meeting.

### REPORT OF STEERING SUBCOMMITTEE

The Subcommittee on Agenda and Procedure, to which the Chairman designated Messrs. Hellyer, Fairfield, Smith (*Calgary South*), and Winch to act with him, met on Tuesday, May 3, at 4.30 o'clock p.m.

All members of the said Subcommittee attended.

After discussion, the following decisions were agreed to and are recommended for adoption by the Committee:

1. That the Committee meet every Wednesday and Friday at 9.30 o'clock a.m.
2. That the Committee proceed first with a review of expenditures of 1958-59 as reported in the Public Accounts and follow up with a study of the 1960-61 Estimates.
3. That the witnesses to be called at the start be restricted to the Minister and the Department officials.
4. That pursuant to authority granted by Order of Reference of Tuesday, May 3, 1960, the Committee print, from day to day, 750 copies in English and 250 copies in French of its Minutes of Proceedings and Evidence and such papers as the Committee may order.

Respectfully submitted,

G. E. HALPENNY,  
*Chairman.*

Mr. HELLYER: What was the third recommendation?

The CHAIRMAN: That the witnesses to be called at the start be restricted to the minister and the department officials.

May I have a motion to adopt the minutes?

Mr. HELLYER: Before you do that, Mr. Chairman, I would like to say this.

First of all, it was our understanding that you were going to call another steering committee in the interim.

The CHAIRMAN: That is right.

Mr. HELLYER: And this was not done.

In addition, I have no recollection of that third proposal; and I want to object to the first one before the meeting gets under way, in order to have it decided by the committee as a whole.

I feel—

Mr. SMITH (*Calgary South*): Are you referring to the first one?

The CHAIRMAN: That the committee meet every Wednesday and Friday at 9.30 a.m.

Mr. HELLYER: It would be the second.

The CHAIRMAN: That the committee proceed first with a review of expenditures of 1958-59, as reported in the public accounts, and follow up with a study of the 1960-61 estimates.

Mr. HELLYER: Yes. As a dissenter, I feel I should state my position, and that of our party.

The CHAIRMAN: By all means.

Mr. HELLYER: Our position is this. This committee was first agreed to by the Prime Minister on January 20, and almost four months have gone by since. The committee itself was set up on March 17. On the basis of the proposal that we only meet twice weekly, the maximum number of additional meetings that we can anticipate after today is fourteen, before the end of June. You, sir, and others, have speculated the house may rise at the end of June, in which case we would have to suspend or postpone our work.

The CHAIRMAN: That was a personal opinion of mine.

Mr. HELLYER: In view of this, it seems to me we should reverse the order, and consider, first, the estimates for the 1960-61 period, and call such witnesses as we like following that. Then, if there is any time left at the end, we should then consider the estimates for the 1958-59 period. This would seem to me to be putting the business of this committee in the proper order, and the proper perspective because, although the estimates for the 1958-59 period will be interesting to study, they are not of the urgent importance that the proposed estimates for the current year are.

We feel that this committee has a duty to examine the objectives of the government of Canada in defence matters, and that we should hear what they are immediately. It is our opinion that we should spend much time discussing these, until we have exhausted the subject matter contained in those discussions. Then, at that time, we should consider the public accounts committee. If, in the meantime, it becomes obvious there will not be sufficient time for this committee to consider the public accounts aspect, then we should propose that the public accounts aspect of this committee could be better dealt with in the public accounts committee itself.

I would suggest that we consider the estimates for the 1960-61 period at the outset, and that we ask the minister to make a statement of the government objectives in defence matters at the next meeting of this committee, if he is not prepared to do so today. Then, following that, I suggest we have briefings by such of the minister's staff as he would wish to have brief us on various aspects of our defence organization. At his discretion, we might be given some in camera briefing on intelligence, and following that we should call witnesses. We have some witnesses in mind—those we discussed in the steering committee meeting. A number of names have been suggested, but there are four or five that I would like to have called.

Mr. SMITH (*Calgary South*): Mr. Chairman, I wonder if we could take this one point at a time.

Mr. HELLYER: I would be agreeable to that.

The CHAIRMAN: Thank you very much. Mr. Hellyer, your views of today were exactly those expressed at the steering committee, and there is no change in those.

We considered Mr. Hellyer's suggestions at the steering committee meeting. There is only one point I would like to draw to Mr. Hellyer's attention, and it is this. Although I felt that two steering committee meetings would

be necessary, you will recall that at the finish of the last, I felt we had pretty well covered all we could until such time as we had held one or two meetings. Then, we could call a steering committee at any time. We even could call one this afternoon, if we found it necessary.

Mr. HELLYER: It was our understanding that you were to call two.

The CHAIRMAN: I did say that, at the beginning.

Mr. WINCH: Mr. Chairman, I do not want to cause any confusion, but my feeling, or my knowledge, is very similar to that of Mr. Hellyer.

We did have that one meeting, in which there were a number of discussions held. As you put it, perhaps a decision was made but, at the same time, I am certain, that on thinking back, you will remember that before we adjourned that sitting I stated that, as far as I was concerned, I would like to have the week-end to think all these matters over.

The CHAIRMAN: That is right.

Mr. WINCH: And, in that way, we could come up, perhaps, with more definite proposals and, if necessary, reconsiderations. You will remember that I said that and, because that was my understanding, I phoned your office on Monday morning to see just when the second meeting was going to be held. Unfortunately, you had not returned at that time.

The CHAIRMAN: That is right.

Mr. WINCH: I do want to say, Mr. Chairman, that I did anticipate a second steering committee meeting but, perhaps, we could get down to greater consideration of the matters which you have already mentioned.

One reason I am sorry that it was not held is because I had come to somewhat of a similar conclusion as that which Mr. Hellyer now has pointed out—that, perhaps, in our preliminary discussions, we were wrong in saying that we should start on the public accounts first, because I feel we should start on the estimates.

I still go along with the idea that the opening period should be taken up with a statement by the minister and departmental heads, and after that an opportunity given for calling witnesses other than those in the department.

The CHAIRMAN: Mr. Smith, you were at the steering committee meeting; have you any comments?

Mr. LAMBERT: Do I understand that the witnesses, to which you are referring, would be heard in public meetings?

Mr. WINCH: All these different witnesses?

Mr. LAMBERT: Yes.

Mr. WINCH: Most certainly. I have nothing to hide, and I hope the department has not.

Mr. LAMBERT: Mr. Chairman, I want to get the inference of Mr. Winch's remarks, that the department would be hiding something.

Are you referring to these non-departmental witnesses uncovering matters?

Mr. WINCH: I beg your pardon?

Mr. LAMBERT: Is it your suggestion that these witnesses would be uncovering matters?

Mr. WINCH: It is my submission—if that needs clarification—that this committee was appointed to make certain studies and do a certain job, as a responsible committee. I do not think it is going to be done if you only hear one side of a proposition. Undoubtedly, there are others in this country, in possession of knowledge, who would like to have something to say. We certainly would like to hear them—and certainly not hide their evidence.

The CHAIRMAN: Mr. Smith, have you something to say?



Mr. SMITH (*Calgary South*): Mr. Chairman, I would like to make one point.

In so far as witnesses to be called are concerned, I do not believe there was any firm decision made on that.

Mr. WINCH: No.

Mr. SMITH (*Calgary South*): That is certainly correct.

The CHAIRMAN: In so far as witnesses to be called at the start, the suggestion was made that we restrict it to the minister and his departmental officials. Then, it will be wide open for our second steering committee to proceed.

Mr. SMITH (*Calgary South*): In so far as the procedure is concerned, Mr. Chairman, I thought there was some unanimity of opinion on this. Certainly, I thought there was from Mr. Hellyer—and that the estimates having been referred to us, we would take them in the order given to us.

Speaking for myself—and I have no objection to the sequence, except this is the basis on which they were referred to us by the house—I believed this was generally the idea of the steering committee.

The CHAIRMAN: Have you a comment, Mr. Chambers?

Mr. CHAMBERS: Mr. Chairman, I just would like to say that obviously 1958-59 comes before 1960-61—and if you want to have a proper examination of what you might call the development of defence over this period which we have under review, we would do better to take the public accounts part of it first. I do not believe it should take very long to dispose of them, and then we could get on to what really flows from the first part of our work.

The other point, on which I wish to speak, is that Mr. Hellyer has said something about fourteen meetings. I think that members of the House of Commons and, possibly, the public, expect that this committee will get through the work that has been given to it. I do not want to make any comment in connection with the forecast of the end of the session but, if it is going to end at the end of June, perhaps this committee could meet more often than twice a week in order to get through its work. However, I do not think we should start out at the beginning with the idea that we are not going to complete the work the house has given to us.

The CHAIRMAN: There is no thought whatsoever of that.

I am betting that the house will have a recess this summer. However, I have been wrong before and I will be wrong many times again.

If the work of this committee is not finished, and if we do have a recess, we certainly will reconvene in the fall, when we come back.

This committee is going to continue its studies until we are all agreed that we have completed our comparison of the estimates and the expenditures of the 1958-59 period, and a complete study of the 1960-61 estimates.

Mr. Fairfield, you were at the meeting; have you any comments to make?

Mr. FAIRFIELD: Mr. Chairman, I would like to say that Mr. Hellyer had the same reservations during the steering committee meeting as he has today. Certainly to me, he seemed to agree that this is the proper order in which this should be taken—and I do not think there is any doubt about that.

Mr. CARTER: Mr. Chairman, if we go over these expenditures in this committee, will they be gone over again in the public accounts committee?

The CHAIRMAN: Which expenditures?

Mr. CARTER: The defence expenditures.

The CHAIRMAN: Well, we have gone over the estimates for 1958-59, and now we are going to go over the expenditures, and compare those with the estimates.

In regard to 1960-61, we are going over merely the estimates. We cannot go over the expenditures.

Mr. CARTER: If we go over these expenditures, to which you have just referred—

The CHAIRMAN: Yes.

Mr. CARTER: I would just like to say, Mr. Chairman, that there is a public accounts committee for that purpose.

Will the public accounts committee go over these expenditures again?

The CHAIRMAN: I would not have the slightest idea.

Mr. WINCH: They have not been referred to public accounts; they have been referred here.

Mr. CARTER: In other words, we are doing the work that another committee should do.

Mr. WINCH: I think it is absolutely safe to say that they would not be referred to public accounts. If we do not deal with them, they will not be dealt with at all. So, I say, let us keep them right where we have them.

The CHAIRMAN: May I read to you the order of reference:

That a special committee be appointed to examine all expenditure of public moneys for national defence and all commitments for expenditure for national defence since April 1, 1958, as reported in public accounts—

And so on.

Mr. HELLYER: If I may, I must return to this point. I think that the important work of this committee is a complete, full and frank discussion of defence matters in all aspects. I think this is what the people of the country expect us to do and what we as representatives of the people of the country have a responsibility to do.

The CHAIRMAN: And that is what we will do.

Mr. HELLYER: It is some time since this matter was brought up and the committee is only now beginning to get under way. If we postpone until later the important work which we have to do, I think the people of this country will not understand the interminable delay in getting down to the serious business at hand. I, for one, will not take the responsibility for dealing with matters which are interesting but are relatively inconsequential.

The CHAIRMAN: Do you not think the expenditures for 1958-59 are important?

Mr. HELLYER: They are important enough to be dealt with after we finish the urgent business to be dealt with by this committee.

The CHAIRMAN: That is your opinion.

Mr. HELLYER: Yes. After the end of June, even if the house is sitting, the interest of the people of the country then will wane and if the weather is hot it will be difficult for us to do all the things we have to do. We should start at the outset to discuss the estimates for 1960-61, leaving for later the other order of reference.

There are a number of persons I would like to have heard by this committee. We think Dr. Solandt—

The CHAIRMAN: Just a minute. We are going off on a tangent. As is stated in the third paragraph in the report the witnesses to be called at the start would be restricted to the minister and the departmental officials. That is all we have said here. In the steering committee we agreed it would be a problem to know where to end if we started calling others. We had one suggestion at the meeting which I want to discuss further at the next steering committee meeting which might be held this afternoon if necessary. However, I do not wish to bring that up now.

Your main point is that you feel we should go along with the 1960-61 estimates before the expenditures for 1958-59.

Mr. HELLYER: Yes, there is the relevant question as to whether or not a number of witnesses should be heard in addition to the departmental officials.

The CHAIRMAN: There might be.

Mr. HELLYER: This gives some indication of the number of meetings necessary before we would have covered the examination.

The CHAIRMAN: Are we limiting ourselves to meetings? When I say we will meet every Wednesday and Friday that does not mean we will not meet on Monday, Tuesday, Thursday and Saturday.

Mr. HELLYER: But you said it would be impracticable to work in more meetings.

The CHAIRMAN: Yes; but we might have to continue in the afternoon on some days.

Mr. SMITH (*Calgary South*): There is the suggestion I made at the steering committee meeting that the committee members submit to you, for the consideration of the steering committee, the names of the witnesses whom we would like to hear so that consideration may be given to them in relation one to the other and then the steering committee report back to the general meeting. Do you agree with that, Mr. Hellyer?

Mr. HELLYER: I did agree with it; but it was my understanding we would do that in advance of this meeting so that we could consider the matter.

The CHAIRMAN: We still can have that suggestion. I really wanted to figure out that one. Also, Mr. Winch, at the steering committee I think you suggested that perhaps we could limit it to ten persons outside the department. That was one suggestion which was thrown in.

I would ask that we withhold very much more discussion on this point until we have another steering committee meeting.

Mr. WINCH: That is the point I was coming to. I am afraid we are going over a wide range of things and there is a danger that we will get mired down.

In order to take it point by point and keep it on what I think is a proper basis, I would like to move that in our procedure we commence with the estimates which are before us.

Mr. HELLYER: 1960-61.

The CHAIRMAN: Are you moving in effect that the steering committee report, which we have, be accepted?

Mr. WINCH: No. This is the opposite.

The CHAIRMAN: You are moving that the estimates for 1960-61 be dealt with before the public accounts. Have we a seconder?

Mr. HELLYER: I second the motion.

Mr. CARTER: The matter of the expenditures is water under the bridge. We cannot save the country any money by going over them. We may decide whether or not they have been spent wisely or whether they could have been spent to a better advantage.

The CHAIRMAN: You feel that the public accounts are not worth while.

Mr. CARTER: I am not saying that.

Mr. WINCH: They are second in priority.

Mr. CARTER: You made the statement just now that you had the idea that we would recess at the end of June and come back for a fall session.

The CHAIRMAN: That was my own personal opinion.



Mr. LAMBERT: That is a red herring.

Mr. CARTER: It is not; it is a possibility. Whether it is or is not a possibility we are now concerned about the lack of progress we have made with the business of the house up to date. Defence estimates account for the biggest item in our whole government expenditures. If we defer this and take the expenditures first, then we are deferring the estimates to a much later date, which would be retarding the work of the house. If there is a summer recess and we do not get to the estimates, then the estimates will be deferred until we come back in the fall. In the interests of speeding up the work of the house, it would seem we should deal first with the estimates.

At the moment we cannot do any good for the country by going over the expenditures. That is water under the bridge. We can cry over spilt milk if we want, but that is all we could do about it. Here, however, is something that is urgent and necessary. It would seem to me the right priority is to deal with first things first.

Mr. BALDWIN: I do not think we are here to provide an interesting topic for discussion but to deal with the estimates, and I think it is a necessary prerequisite to know something about the expenditures. I am opposed to the motion.

Mr. SMITH (*Calgary South*): Mr. Baldwin has expressed my opinion. I recall that Mr. Hellyer at the steering committee meeting was interested in whether or not we would be able to call witnesses in relation to the CF-105. We seemed to have concurrence in the steering committee on that point.

Mr. HELLYER: I think we should have a recorded vote on this.

The CHAIRMAN: All right. The motion, moved by Mr. Winch and seconded by Mr. Hellyer, is that the order of business proposed in paragraph 2 of the report of the steering committee be reversed; that is that the estimates for 1960-61 come first and the expenditures for 1958-59 come second.

All in favour of the motion?

The CLERK: Four.

The CHAIRMAN: Contrary?

Mr. CARTER: A recorded vote was asked for.

The CHAIRMAN: The clerk will call the names, starting with Mr. Baldwin.

The CLERK: Mr. Baldwin.

Mr. BALDWIN: Nay.

The CLERK: Mr. Carter.

Mr. CARTER: Yes.

The CLERK: Mr. Chambers.

Mr. CHAMBERS: Nay.

The CLERK: Mr. Fairfield.

Mr. FAIRFIELD: Nay.

The CLERK: Mr. Forgie.

Mr. FORGIE: Yes.

The CLERK: Mr. Hellyer.

Mr. HELLYER: Yes.

The CLERK: Mr. Lambert.

Mr. LAMBERT: No.

The CLERK: Mr. MacEwan.

The CHAIRMAN: Absent.

The CLERK: Mr. Parizeau.

Mr. PARIZEAU: Nay.

The CLERK: Mr. Pratt.

The CHAIRMAN: Absent.

The CLERK: Mr. Roberge.

The CHAIRMAN: Absent.

The CLERK: Mr. Smith (*Calgary South*).

Mr. SMITH (*Calgary South*): No.

The CLERK: Mr. Webster.

The CHAIRMAN: Absent.

The CLERK: Mr. Winch.

Mr. WINCH: Yes.

The CLERK: Ayes 4; nays 6.

The CHAIRMAN: Thank you, gentlemen. I declare the motion lost.

Mr. SMITH (*Calgary South*): I move that we accept the steering committee's report, with perhaps a clarification of paragraph 3 which makes reference to the minister and his officials. The members of the committee could submit to you and the steering committee any suggested names which they would recommend might be called and those names could be considered by the steering committee.

At the time of the steering committee meeting there was no firm decision as to which witnesses would be called. Because of the implication that we are only going to call the minister and some officials I would like an opportunity to be provided for the committee members to submit any suggested names to the steering committee.

Mr. WINCH: I second that.

Mr. SMITH (*Calgary South*): I am not suggesting that it need even be an amendment, provided it is an understanding by the committee.

The CHAIRMAN: Would your suggestion be covered if instead of No. 3 "that the witnesses to be called at the start be restricted to the minister and the departmental officials" we put in "that the question relating to the calling of witnesses be considered as it arises".

Mr. CHAMBERS: Why do we not leave that as it is now?

Mr. LAMBERT: No. I will go along with Mr. Smith's suggestion. I do not think it would be satisfactory to deal with it on a *ad hoc* basis. I think we should set out clearly that the committee members have the right to submit to the steering committee their suggestions in this respect, and then we can decide what we will do when the suggestions are put forward.

The CHAIRMAN: What we could do is put in a new paragraph 4 and change present paragraph 4 to 5. We could put in a new paragraph to the effect that the steering committee would suggest a list of names of individuals whom each member of the committee would like called.

Mr. SMITH (*Calgary South*): My reason for having the steering committee make the final decision—of course it is only the committee which can make the final decision—the steering committee can make a screening job which would avoid duplication and they could do a job in making the final recommendation.

The CHAIRMAN: Would it be satisfactory if we put in a new paragraph which says that each committee member may submit a list of the names of witnesses he would like to have called, and that these will be considered by the steering committee. Is that agreed, gentlemen?

Mr. SMITH (*Calgary South*): Agreed.

The CHAIRMAN: Is it agreeable?

Mr. WINCH: I would like to move that the report as amended be adopted.

The CHAIRMAN: Do we have a seconder?

Mr. LAMBERT: I second the motion.

The CHAIRMAN: It has been moved by Mr. Winch and seconded by Mr. Lambert. All in favour? Contrary, if any? Agreed.

Now, gentlemen, we have with us this morning our Minister of National Defence.

Mr. CARTER: Before we start and the minister introduces the subject, is it possible that the steering committee or this committee might give some thought to apportioning the time to this particular phase of the investigation so that we will be sure to have sufficient time to go over the defence estimates without having to hurry up at the end of the session?

The CHAIRMAN: At the first meeting of the steering committee it was felt that we could get through the 1958-59 comparison of expenditures to estimates in three or four meetings at the outside if we really pushed this through, realizing that we have this other work to do afterwards.

We cannot just close off and state that at the end of four meetings we are not going to do any more; but if every person cooperates on this, I cannot see any reason in the world why we cannot get through with this, because we have them outlined so clearly in front of us.

Therefore with full cooperation I feel sure we can get through our task.

Mr. SMITH (*Calgary South*): If not, the answer is to meet every day.

Mr. HELLYER: Could we agree to take two meetings on the expenditures and then suspend them and consider the estimates for the year 1960-61, and return to the expenditures again.

Mr. CHAMBERS: If we could get started on those expenditures, I think that after one or two meetings we might consider it.

The CHAIRMAN: I suggest that we complete one job at a time. Now may I introduce our Minister of National Defence, Mr. Pearkes who has with him his deputy minister and other officials of his department.

Mr. Pearkes wrote me on May 6, when he said:

As requested, I am attaching a number of sheets showing the expenditures of the Department of National Defence for the year 1958-59.

He stated that these would be put in your mail boxes. Did every member receive them? Oh, you did not receive one, Mr. Carter. Do we have an extra copy? Is there anyone else who did not receive these? We are just one short—just Mr. Carter.

Now, I would imagine that Mr. Pearkes would wish to start with a statement, and before he does so, perhaps we could distribute the notes on the 1958-59 expenditures in relation to the estimates as a measuring stick, and this should enable us to follow Mr. Pearkes without any trouble. We could even follow him without it, but this might help. Okay then. Mr. Pearkes, if you please.

Mr. G. R. PEARKES (*Minister of National Defence*): The chairman has issued to you a statement which I propose to read. I shall make a few observations as I go along, so I may be able to answer any questions. It is a general comparison of the expenditures as related to the estimates of 1958-59.

May I say at the outset that it is my intention—and I can assure you it will be the policy of the department—to give you all the information we possibly can about these expenditures. We have nothing whatever to hide, and we shall explain to you any points on which you require additional information.

You will recall that in 1958-59 the general defence expenditures were under one vote. That was referred to as defence services, and those of you who were on the estimates committee of that year will recall the recommendation in that, the vote be divided up so that there were at least two votes for each of these services.



We will have to deal with the vote as it appeared; but in the papers, the tables which have been issued to you, you will find that we work by the separate services, and therefore we can deal with each service separately.

The first page is merely a general summary of all the expenditures in the department. The following pages deal first with the navy, the army, the air force, and then with the defence research board and with administration.

I think you will find this a convenient way of dealing with these matters of expenditure. The only comment I wish to make is that if you look at the second of the following pages you will see in brackets behind the definition of the cost categories, a number. That is merely the number of the primary concerned.

Now, let us turn to the memorandum which has been distributed, and I think I had better read it.

The tables placed before the committee summarize in, what I hope, is a convenient form the estimates and expenditures for 1958-59, and include, for comparative purposes, expenditures during the preceding three years.

We were not asked to examine these, but I thought that if we gave you a year or two before, it would give you a comparison. Times change, and we must always recall the atmosphere of the years which we are considering.

The first table is a composite table listing the total expenditures for the department as a whole. These expenditures are broken down at the top of the table by the main components of the department and, in the blocks below this, by major categories of expenditure.

You will see in the left hand column navy, army, air force, and so forth. These are the main components of the department; navy, army, air force, defence research and development, administration, inspection services, mutual aid, and direct charges for infrastructure; and then the small vote dealing with pensions, and so on.

Below that you get the analysis of cash distribution, and we deal with these major categories: personnel costs, operation and maintenance, construction, procurement of equipment and development, and then contributions to infrastructure and NATO.

The other columns give the actual expenditures in 1955-56, 1956-57, and 1957-58; and then the year we are dealing with, the expenditures of 1958-59 as compared with the estimates.

Let us take the first one, the navy; the total navy estimates of that year were \$281,615,000; the actual expenditures were \$272,960,000.

The CHAIRMAN: If the minister would excuse me, I think it would be wise if we had these complete tables published as an appendix. Is that agreeable?

Agreed.

(See Appendix A)

I do not think we need a motion to that effect if it is agreeable to everybody. I am sorry, please proceed.

Mr. PEARKES: There is no objection on my part to that.

A more detailed analysis of these categories of expenditures is set out for each of the components, navy, army, air force, and so on, in the remaining tables. Thus all the expenditures of the department are covered in these tables.

I might say that the officials present have what we call an information book, dealing with each of these items; and to any question which you wish to ask concerning any of these items we will be able to give you the information, and if it is not there, we will be able to get it for you at the next meeting.

Just to explain the second heading, that is the mutual aid special account; the departmental expenditures in 1958-59 total \$1,424,740,758.73, against the estimate of \$1,687,212,593, resulting in an underexpenditure of \$262,471,833.27.

It was decided, subsequently to tabling the 1958-59 defence expenditures, to apply in total the balance of what was known as the mutual aid special account to expenditures for that year. The estimates as tabled provided for the application of \$49,871,000 from this account, to the 1958-59 expenditures.

The decision to liquidate this account in 1958-59 resulted in the application of the total funds in the account of \$211,739,027.96 to the expenditures of 1958-59.

This special account was established by the Defence Appropriation Act of 1950. Under the terms of this act when equipment which had been originally procured for the Canadian forces was subsequently transferred as mutual aid, and thereby given to other NATO countries, the value of that equipment was charged to the mutual aid appropriation, and an equal credit established in this special account to be available for procurement of equipment for the Canadian forces.

Commencing in the fiscal year 1956-57 no further credits were permitted to this account. The value of the mutual aid transfers, referred to above, was simply credited against the current year's expenditures. The account was finally liquidated in its entirety in 1958-59.

Dealing with personnel costs, military personnel costs exceeded the estimates by approximately \$17,270,000. These personnel costs deal not only with matters of pay, but also with matters of rationing, clothing and so forth. And the principal reason for this over expenditure was the transfer of a large quantity of cloth which had been previously purchased and which had been obtained or procured by the Department of Defence Production as a charge to the defence production revolving fund.

This cloth was transferred to the Department of National Defence which involved an expenditure of \$15,069,182. As a result of this transfer the cloth has now been moved into national defence warehouses, relieving the Department of Defence Production of the necessity of renting space for that purpose. As a result of incorporating it into an existing defence warehousing operation, it has been possible to reduce the staff required to look after it from 18 to 9.

It will be noted also that pay and allowances for the R.C.A.F. exceeded the estimate by some \$5 million. This is due in part to the strength of the R.C.A.F. being some 300 to 400 higher. Recruiting was good in this year. They came closer to their ceiling, while still being kept within their over-all ceiling. This increase was greater than had been anticipated, and also the number of men remaining in the service was greater than expected. So, the attrition rate was lower. An underestimation of the numbers qualified for allowances payable to married men, and the number of men becoming married, seems to be a trend, which is increasing. It started increasing about that time. These, as well as certain other elements of higher pay, account for the balance.

"Operations and maintenance" is next.

Expenditures under these headings were lower than those estimated by between two and three per cent of the total estimate of approximately \$604 million. There were no major changes in this area having an important influence on the final result. Civil salaries constitute a large element of these costs, and total expenditures charged to civil salaries in the year amounted to \$175,912,517 against an estimate of \$176,395,694. That is, civil salaries continued to increase from the previous fiscal years, but the continuing establishment has been reduced steadily since 1956-57.

You will notice from the figures set out that in 1956-57, the continuing permanent establishment of civilians in the department was 54,371; in 1957-58,

it was 53,969; 1958-59, 52,023—and that trend has continued until, at the present time, there are 49,417.

As the number of vacant positions was comparatively high during the early part of this period, the civil strength was not reduced in proportion to the reductions in establishments. We were reducing the establishments to keep in line with the work which had to be done, and the number of people we found necessary to do that work. However, in the last year, there has been a considerable decrease in strength, as well.

In 1956-1957 there were 49,795 actual personnel serving; in 1957-58, that had dropped to 48,345; in 1958-59, it was 48,956; and in 1959, it had dropped to 45,911.

"Construction" is the next major item. Expenditures on construction were some \$24 million less than estimated, of which approximately \$20 million was in the R.C.A.F. and \$4 million in the R.C.N. In both of these cases this under-expenditure was largely due to an inability of the engineering staffs to get detailed plans and specifications brought forward quickly enough to get contractual action taken and expenditures made on the projects to the amount estimated in the fiscal year. We certainly hoped that more construction could have been done but, due to a variety of circumstances, some of the construction had to be delayed to subsequent years.

The next heading is "procurement of equipment". Equipment expenditures were approximately \$65 million less than estimated. The most significant under-expenditure was for aircraft for the R.C.A.F., where expenditures were some \$41 million less than estimated. Most of this was attributable to the CF-105 program. In September of 1958, certain elements of this program were cancelled—and this refers to the ASTRA fire control system and the Sparrow missile. Subsequently, in February, the whole CF-105 program was cancelled. This also was the main reason for under-expenditure under the heading of ammunition and development for the R.C.A.F.

In the navy, there was a very considerable under-expenditure on the estimate for signals and wireless equipment. This was due to an unduly optimistic assessment of the time required to bring a number of projects to the point where contracts could be let and expenditures made. I might say there was very considerable development in the wireless equipment at that time. On the other hand, expenditures for ships in the navy exceeded the estimate by close to the same amount as the under-expenditure on signals and wireless. This was, in the main, the result of speeding up the process of billing on the ship construction work on the original program of fourteen anti-submarine escorts. The second seven of the destroyer escort program were all under construction and, in fact, were nearing completion. They were being commissioned in that year. There was a speeding up of the submitting of the bills for that construction.

Army expenditures on equipment were some \$10 million less than their estimate of \$49,871,000. Expenditures for vehicles and transport were quite considerably less than estimated, largely as a result of the reduction in the quantities procured following detailed reviews in the course of the year. Reviews were carried out and, of course, these estimates are continually examined, as we go along; and it was found there were more vehicles on order than were essential. On armament, there was some under-expenditure, and this was in the main the result of a longer time being taken than originally thought necessary to bring certain items to the stage where procurement could commence. You realize, you go through the various stages: first of all, research, then development, and then we go into regular procurement. This was also true in the procurement of signals and wireless equipment, where procurement of a number of items did not get under way as quickly as anticipated.

"Contribution to infrastructures and NATO budgets" can be based on the percentage of the infrastructure—that is, the overhead requirements in the



way of buildings, airfields, and that sort of thing, by our NATO allies. These buildings are outside of Canada. They are in France, Germany and other European countries. The estimate is submitted by NATO and, you will see there was an over-optimistic estimate made in this case. The estimate of \$21,500,000 was based on information supplied by the infrastructure committee of NATO as to the probable billings that would be made in respect of Canada's contributions in the course of the fiscal year. Actual billings were substantially less than this estimate, resulting in an under-expenditure of approximately \$9 million.

These are the general explanations as to why the amount of money which was voted by parliament could not be spent during that fiscal year, and which resulted, as I have said, in a considerable saving of some \$262 million in that year.

There was a continual review of the estimates, and there was a sincere effort made by the services and the department to eliminate any possible duplication there might be and the purchase of any unnecessary equipment—or, in general, to have a greater effort made to keep defence expenditures down.

I believe that is all I have to say at this time.

The CHAIRMAN: Thank you, very much Mr. Minister.

Gentlemen, it was suggested at the steering committee meeting that we could use these sheets—the comparison of expenditure sheets—as more or less of an organized agenda.

As Mr. Pearkes pointed out to you, the first sheet is, more or less, a consolidated statement.

If you wish to get along with the questioning, I would suggest you turn to sheet No. 2, which is Department of National Defence (Navy). I suggest we take it item by item, and that when we are through with an item we will close it out—unless there are some answers that cannot be given at today's or subsequent meetings. If that is the case, we will hold it over until we get the information.

Mr. HELLYER: Mr. Chairman, I have two or three short general questions before we proceed.

The CHAIRMAN: Yes.

Mr. HELLYER: Mr. Minister, on March 31, 1959, were your army, navy and air force as well equipped as you would like to have seen them?

The CHAIRMAN: Before you answer that, Mr. Minister, I would like to say that is one of those all embracing questions that is going to start an argument. Mr. Hellyer, I was under the impression that you did want to get through this particular part of the proceedings—the review of expenditures of 1958-59—but now you bring up that question. I suggest that as you come to one of these items on the three sheets I mentioned, you ask particular questions on the item.

Mr. HELLYER: Mr. Chairman, I think it is a fair question, and one he can answer because, when he spent \$262 million less than authorized by parliament, we should know whether this was due to improper estimating or incompetent management. Something obviously is very wrong, and I think the minister should tell us whether he thought at that time he had the equipment necessary for his armed forces, or whether he did not.

Mr. CHAMBERS: I think the member should have listened to the explanations given for the difference between the expenditures and the estimates.

Mr. HELLYER: I did—and I think these were made up by a public relations man, whose orders were to make it as dull and uninteresting as possible, and rationalize everything that has happened.

Mr. CHAIRMAN: Mr. Winch.

Mr. WINCH: My question is not just the same, but is this: Just before we start on the sheet, item by item I was wondering, in connection with the presentation we have just had from the minister if, at page 2, where he gives the decrease in the numbers of civil servants on a permanent basis—

An hon. MEMBER: To what are you referring?

The CHAIRMAN: Paragraph 5 of page 2.

Mr. WINCH: Yes, where certain figures are given from 1956-57 to 1960-61. I understood the minister to say these are on a permanent basis.

My question is this. Can the minister supply for the same period all the corresponding numbers who are employed on a casual basis? I wonder if that information could be supplied later.

The CHAIRMAN: Can you get it, Mr. Minister?

Mr. PEARKES: I doubt if we have that information here.

Mr. WINCH: Sometimes, Mr. Chairman, as you know, there are vast numbers who cannot be employed for years, but—

The CHAIRMAN: I can tell you where we could find that out. As we go over these items, you will find the dollars involved, and if the dollars go down you will know the permanent and the casual are down.

Mr. WINCH: Not quite, Mr. Chairman, because there have been changes in the salary schedule.

The CHAIRMAN: Possibly when we arrive at that item, they may have more information for us.

Mr. PEARKES: We will be able to get you the information you wish, but I do not think in that form, because these are so many man-days authorized.

Mr. WINCH: Well, give it in man-days.

Mr. PEARKES: We will do it at the next meeting.

The CHAIRMAN: Mr. Lambert.

Mr. LAMBERT: Mr. Chairman—

Mr. HELLYER: Mr. Chairman, before we go on with these details, there is one more general question I would like to put.

The CHAIRMAN: I have given the floor to Mr. Lambert, and you will have the floor next.

Mr. HELLYER: It is a short question.

The CHAIRMAN: Let us get this straight, Mr. Hellyer. You are one member of this committee—

Mr. HELLYER: I realize that.

The CHAIRMAN: —and there are 14 other members on this committee. I am going to give you as much consideration as I give any other member, and I am not going to give you one bit more. That is being fair.

Proceed, Mr. Lambert.

Mr. LAMBERT: I have a question dealing with the first item, military personnel cost, with respect to the navy. The minister made some observations in his report with respect to pay and allowances in the R.C.A.F. Does the same tenor apply to the navy? Are you finding that your proportions of housekeeping costs, in so far as personnel is concerned, is as high in the navy as it is in the other services? Are your pay and allowances in regard to housing, schooling and so forth, as high in the navy as in the other services?

Mr. PEARKES: Well, the pay and allowances are the same. Of course, the schooling would not be as great. The great expense for the schooling of the other services—that is, for the dependent children—is incurred because there are stations of the army and the air force outside of this country, and in remote areas, whereas married personnel of the navy, in the main, live in Esquimalt on the west coast, Halifax, and Cornwallis on the east coast, and schooling

does not come nearly as expensive because a higher percentage of the children of naval parents go to the ordinary schools of the area.

In regard to the general navy, the total strength on March 31, 1958, was 19,867, and that increased, during the year to 20,478. So, the same general trend of an increase in the strength of the navy, as reflected in the air force, is seen there.

Mr. CARTER: Mr. Chairman—

The CHAIRMAN: Were you through, Mr. Lambert?

Mr. CARTER: Mr. Chairman, I am raising a point of order.

It is usual, Mr. Chairman—or it always has been—to ask questions on the minister's statement. I understand that Mr. Lambert's question is related to personnel costs.

The CHAIRMAN: It was at the direction of the chair.

Mr. CARTER: On a point of order, Mr. Chairman, and on a point of procedure, it would seem to be more logical to deal with the minister's statement before we go into detailed statements.

The CHAIRMAN: The only reason I suggested the course I did is because, as you go through those, you will find all that information in the items. I thought you could tie it in a lot better at that time. In that way it will enable us to get through these 1958-59 expenditures much quicker.

Mr. WINCH: On a point of information, Mr. Chairman: under category No. 1, are you discussing the entire category, or are you taking it item by item?

The CHAIRMAN: We are taking pay and allowances, under military personnel costs—item No. 1, first.

Proceed, Mr. Hellyer.

Mr. HELLYER: During the period covered by these expenditures, was any construction project recommended by you to treasury boards which was either refused by or deferred by treasury board?

Mr. PEARKES: I should think very likely, because it is the responsibility of treasury board to review all the expenditures to see whether they are in line with the actual estimates, and to advise whether there is the money available to meet that expenditure at that time.

Mr. HELLYER: Do you think it would be fair to say that would be a contributing factor to the under-expenditure in the construction category for that fiscal year?

Mr. PEARKES: Yes. Undoubtedly, there would be some projects which, in the general review of treasury board would have been deferred to a later date or, perhaps, eliminated.

The CHAIRMAN: Gentlemen, may we get back to "military personnel costs"?

Mr. WINCH: Mr. Chairman, under "pay and allowances"—

The CHAIRMAN: This is navy—that is page 2?

Mr. WINCH: Yes.

The CHAIRMAN: Go ahead, Mr. Winch.

Mr. WINCH: On the annual expenditures—from 1956 to 1957, and up to 1958 and 1959—it goes, on approximate figures, \$67 million, \$74 million, \$76 million.

Is it possible for the minister to give any approximation as to whether the increase is due to increased allowances, or to an increase in the actual personnel?

Mr. PEARKES: I think it would be fair to say that both of those were contributing factors. There was a gradual increase in the number of personnel. Ceilings were set several years before and recruiting took some time to get up to those ceilings. Also there were more personnel who were taking trades



pay. The fact they had been in the service and were re-enlisting qualified them for a higher rate of pay.

As in the post-Korean war years the services were generally stabilizing their personnel, more men were accepting it as a permanent career, and more men were re-enlisting, so the general expenditures went up, because the individuals qualified for higher rates of pay by acquiring more qualifications, trade qualifications, which entitled them to extra allowances.

Mr. WINCH: Could I ask how close you are now, in your personnel, to the ceiling which was established a few years ago, on the basis of the navy?

Mr. PEARKES: The services are up to their ceiling.

Mr. WINCH: They are up to their ceiling in the navy?

Mr. PEARKES: Yes. Perhaps I should make one little qualification there. Limitation has been set on the army by the department, so that they are not quite up to the overall ceiling which was given. I think the overall ceiling was 49,000, and we have said they should not recruit, at the present time, over 47,700.

The CHAIRMAN: Mr. Minister, I thought Mr. Winch's question was on the navy.

Mr. WINCH: Yes.

The CHAIRMAN: Yes, Mr. Carter?

Mr. CARTER: Mr. Chairman, mine is on "food supplies".

The CHAIRMAN: We will be down there in a second, Mr. Carter. Are there any further questions on "pay and allowances"?

Mr. SMITH (*Calgary South*): Mr. Minister, I wonder if I might ask if during this period any of the personnel, because of the effects on pay and allowances of the naval staff, were eliminated by nature of the fact you had a duplication with any other service, and thus you eliminated, conceivably, personnel by giving a combined service approach—I mean, otherwise putting them together in a provost corps, or something of that nature?

The CHAIRMAN: Tri-service?

Mr. SMITH (*Calgary South*): Yes, on a tri-service principle?

Mr. PEARKES: I do not think there was any overall reduction. If there were people found to be doing a job which another service was doing they would transfer to other positions in the service.

Mr. SMITH (*Calgary South*): I am thinking of the recommendation which affected this particular grouping. Of course, this would not show up in this year, in any event, but in a subsequent year.

Mr. PEARKES: The recommendations which were made regarding the unification of medical personnel, etc., would not show up in this expenditure.

The CHAIRMAN: Are there any further questions on "pay and allowances"? Item agreed to.

The CHAIRMAN: "Travelling and removal expenses".  
Yes, Mr. or Monsieur Lambert?

Mr. LAMBERT: Has any effective reduction been made, or has any attempt been made to reduce this item by longer postings? And, if so, has that materially reduced the expenditures in this category? I believe it was subject to some recommendations?

Mr. PEARKES: An attempt has been made to have postings made longer. We have, in effect, established an east coast and a west coast navy. We have allocated certain ships to the east coast and certain ships to the west coast.

When the program on the *Restigouche* class was completed, all the *Restigouche* ships were placed on the east coast, and all the *St. Laurent* class on the west coast; and that has enabled a reduction in the number of transfers which have to be made between the east and west coast.

The CHAIRMAN: Any further questions on "travelling and removal expenses"?

Item agreed to.

The CHAIRMAN: "Medical and dental consultants and special services."  
Yes, Mr. Winch?

Mr. WINCH: On "medical," could I ask the minister a question on the policy on medical services?

Formerly each of the services had their own medical set-up, but now there is this policy of unification. I cannot break it down at the moment, but prior to unification of the medical services there was a total of 477 on staff, and after unification there was a total of 472.

Could the minister give us any information on this very low reduction, and how it applies on the naval services?

Mr. PEARKES: That would not be reflected in these expenditures, because the unification was not introduced until after.

I might say that unification, to date, has not reduced the total number of medical personnel, medical officers. We have been short of medical officers, and are still short of medical officers, but there has been an improvement in the efficiency of the services, and that is not reflected in these figures.

The CHAIRMAN: Those recommendations, I think, were made in 1958.

Mr. WINCH: Yes, I forgot.

Mr. LAMBERT: In this particular field—"medical"—is there a continuation of the tri-service hospital concept being applied generally, or is that the future plan?

Mr. PEARKES: The tri-service hospitals did not come into these expenditures. The tri-service hospitals are now being introduced, and considerable progress is being made.

The CHAIRMAN: Thank you, Mr. Minister.

Do we carry "medical and dental consultants and special services"?

Item agreed to.

The CHAIRMAN: "Clothing, personal equipment." Any questions?

Mr. WINCH: I am sorry, Mr. Chairman—

The CHAIRMAN: Go ahead, Mr. Winch.

Mr. WINCH: Under "clothing," if you follow through on the actual expenditures you will see they were down in 1957-58 over 1956-57. Now it is up to \$2,546,000.

My question has reference, in particular, to the information given us a little while ago—on page 1 of the notes—of the transfer of cloth from the defence production revolving fund to the Department of National Defence, in the amount of \$15,069,182.

I would like to ask the minister, just in general, what is included in the stores of cloth, and if it includes clothing which, I presume, was made? If it does, has there been a review as to the quantities and the qualities?

The reason I ask that is because of the experience in other countries, in the past year in particular, where there have been millions-upon-millions of stores which were absolutely useless, and they would not be used in two centuries. I am thinking of the United Kingdom in particular.

On that angle, what are these stores, and to what extent do they have a value in the realm of utility in the immediate future?

Mr. PEARKES: This reflects the naval portion of the transfer of the cloth from the Department of Defence Production to the Department of National Defence. We can give you the actual amount.

Mr. F. R. MILLER (*Deputy Minister, Department of National Defence*): \$1,696,000.

Mr. CARTER: \$1,696,000 is the naval share?

Mr. WINCH: Are you satisfied, on your stock-taking, this is material of utility value and it is not something that has been bought and is going on the scrap heap some day?

Mr. PEARKES: It is still being retained in warehouses, and some has been disposed of, between 1958 and the present time. However, the bulk of it is still in storage, I believe. It is considered of military value, it is considered prudent to keep that quantity, and it will be used as additional clothing is required.

Mr. WINCH: That is coming to one phase of my questioning, Mr. Chairman.

The CHAIRMAN: Your second question, Mr. Winch?

Mr. WINCH: On the material which has been disposed of, have you any information at all as to the cost of the purchase of that material, the price you sold it at, and who sold it?

Mr. SMITH (*Calgary South*): Could I ask also: Could you tell me how much cloth represents \$1,696,000 worth?

Mr. PEARKES: It is a great quantity; it is a very large quantity, of course.

Mr. SMITH (*Calgary South*): How many yards?

Mr. PEARKES: This was cloth which, in the main, had been purchased during the Korean war years and had been kept by the Department of Defence Production. I am afraid I cannot give you the price of the sale, if any has been sold, because that would have been made through defence production.

Mr. WINCH: War assets disposal?

Mr. PEARKES: Yes, Crown assets disposal.

Mr. SMITH (*Calgary South*): It is in yardage, and it is not in made-up uniforms?

Mr. MILLER: This is cloth which was purchased to make up uniforms in the event of an emergency. There are approximately 15 million yards of it, of various types of cloth, mostly uniform cloth for the three services. None of it has been disposed of through surplus yet. The reduction the minister referred to is the withdrawal out of this stock to make up into uniforms to issue to the services.

Mr. WINCH: You have not sold any?

Mr. MILLER: There has been no disposal.

Mr. WINCH: I understood you had disposed of some.

The CHAIRMAN: It has just been transferred over to the services.

Mr. PEARKES: It has gone into the services, but none has been disposed of to crown assets. When I mentioned that I was not certain and said, "if any had been".

Mr. LAMBERT: This use of the defence production revolving fund, does that mean that somewhere along the line the Department of National Defence has access to certain materials and can make certain expenditures without the control of parliament? Where does the provision come in for this defence production revolving fund—for instance, to make this initial large purchase?

Mr. MILLER: As I recall it, that was provided for by the Defence Production Act, and we reimburse them. We purchase it from them as we use it.

Mr. PEARKES: That has been liquidated now.

Mr. LAMBERT: In other words, they were carrying the inventory, and you are now carrying the inventory?



Mr. MILLER: That is right.

Mr. CARTER: What are the requirements for each service for cloth, per year? What are the annual requirements, and how do they run?

The CHAIRMAN: Could we stick to the navy? Is there any way you could estimate that, Mr. Minister or Mr. Miller?

Mr. PEARKES: The requirements put in by the supply branch of the navy would be based on the number of personnel in the navy and their requirement.

There is always stock in hand, kept in hand. When they were being tabulated an estimate would be made, and a requisition would be put in. It would be reviewed, to see whether it was necessary, and if it was considered correct, why then, a requisition would be made for the purchase.

Mr. CARTER: I understand the procedure, but what I was trying to get at was this: You must know, and have figures in your department, as to how much was used last year and how much was used the year before, and so forth. On that you would base how much inventory you would stock. What is your policy with regard to stocking that sort of thing? Do you buy a 5-year stock, a 10-year stock, or what?

Mr. MILLER: I think it would vary according to each different item. Our procurement is based on one year's consumption, plus a 10-per cent factor for what they call sizing.

At this time I think we have changed the clothing costing system, from the point where we were just normally issuing a uniform, when we were convinced it needed replacement, to that where now we give a clothing credit, and the man shares in the incentive to make his clothing last longer.

Mr. WINCH: Could I ask a question?

The CHAIRMAN: Yes, Mr. Winch, and then we will have to close off.

Mr. WINCH: Can the minister explain the policy reasoning behind the fact that eight years, approximately, at least, after purchase you still have \$15 million-worth of cloth?

Mr. CHAMBERS: 15 million yards.

Mr. WINCH: No, \$15 million is the amount of the cloth taken over. That is what is left after the Korean war; and that was approximately 8 years ago.

What is the basis of purchasing, where, eight years after, you still have \$15 million-worth of uniform cloth?

Mr. PEARKES: I think we will have to consider the situation at the time.

This was Korea. The government of the day thought it might be necessary to mobilize the forces for that war. Therefore, mobilization stocks were provided. It was not necessary to mobilize as large a force as it might well have been, so large stocks were left over from that. Those stocks are now being used. We are not designing new uniforms, but are using the same cloth. We are using up those mobilization stocks.

Mr. WINCH: Are you following the same policy now, in light of the serious world situation, of having stocks on hand in the event of mobilization?

Mr. PEARKES: I think it would be correct to say the general plans regarding provision of large forces for an expeditionary force overseas are not contemplated now.

The CHAIRMAN: Could we hold that item open until the next meeting? Is the motion to adjourn in order?

Agreed to.

We shall meet next Friday at the same time, gentlemen.

—The committee adjourned.

## APPENDIX "A"

DEPARTMENT OF NATIONAL DEFENCE  
FINANCIAL SUMMARY  
(thousands of dollars)

Service	1955-56 Actual Expenditure	1956-57 Actual Expenditure	1957-58 Actual Expenditure	Estimate	1958-59 Actual Expenditure
Navy.....	340,808	326,699	294,989	281,615	272,960
Army.....	461,438	459,452	424,654	437,181	432,853
Air.....	798,248	863,100	818,768	870,015	797,466
Defence Research and Development.....	64,358	69,323	78,666	82,525	74,360
Administration.....	2,964	3,064	3,241	3,360	2,995
Inspection Services.....	8,697	8,088	7,639	8,083	7,112
Mutual Aid-Direct Charges and Infrastructure.....	26,299	22,121	13,647	23,000	13,414
Other (Pensions, Grants, etc.).....	48,086	55,087	59,268	61,304	60,670
Cash Disbursements.....	1,750,898	1,806,934	1,695,872	1,767,083	1,661,830
Add—World War II Eqpt. transfers (Cr. to Spec. Acct.).....	59,379	—	—	—	—
Deduct—Charges to Special Accounts.....	—	—	313	—	37,446
Navy.....	54,542	47,508	24,056	49,871	39,609
Army.....	5,623	—	3,040	30,000	159,944
Air.....	—	—	—	—	—
Budgetary Expenditures.....	1,750,112	1,759,426	1,668,463	1,687,212	1,424,741
ANALYSIS OF CASH DISBURSEMENTS					
I. Military Personnel Costs					
Navy.....	77,002	82,591	88,716	91,277	92,599
Army.....	198,538	206,829	223,622	215,986	223,395
Air.....	188,951	211,854	232,508	229,735	238,274
Total.....	464,491	500,274	544,846	536,998	554,268
II. Operations and Maintenance					
Navy.....	85,367	86,142	88,320	94,222	93,182
Army.....	122,675	123,461	128,489	125,579	125,200
Air.....	252,170	303,043	303,849	292,415	292,415
DRB, Administration and Inspection Services.....	26,075	28,896	30,719	30,706	30,913
Pensions, Grants, etc.....	48,086	55,087	59,268	61,304	60,670
Total.....	534,373	596,629	610,645	604,486	588,380

## III. Construction

Navy.....	11,539	9,985	7,572	11,500	7,544
Army.....	74,805	78,958	46,720	45,745	44,559
Air.....	73,196	120,704	52,256	40,155	21,934
DRB, Administration and Inspection Services.....	1,836	2,126	2,129	3,195	2,633

## Total.....

	161,376	211,773	108,677	100,595	76,720
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## IV. Procurement of Equipment

Navy.....	166,900	147,981	110,381	84,616	79,635
Army.....	65,420	51,204	25,823	49,871	39,699
Air.....	283,931	227,499	225,155	307,450	258,843
DRB, Administration and Inspection Services.....	15,297	4,225	3,274	4,427	3,128
Mutual Aid—Direct Production.....	15,758	8,081	3,179	1,500	1,008

## Total.....

	547,306	438,990	367,812	447,864	382,313
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## V. Development

Navy.....	2,793	2,841	2,254	3,740	2,405
Army.....	3,646	3,929	4,757	3,900	2,637
Air.....	26,372	38,458	46,413	48,000	42,701

## Total.....

	32,811	45,228	53,424	55,640	47,743
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## VI. Contributions to Infrastructure and NATO Budgets.....

	10,541	14,040	10,468	21,500	12,406
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## Mutual Aid

Direct Charges (as above).....	26,299	22,121	13,647	23,000	13,414
Transfers of Service Stocks and NATO Aircrew Training.....	148,667	111,432	104,817	107,000	57,298

## Total Mutual Aid.....

	174,966	133,553	118,464	130,000	70,712
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DEPARTMENT OF NATIONAL DEFENCE—NAVY  
COMPARISON OF EXPENDITURES  
(thousands of dollars)

Cost Categories	1955-56			1956-57			1957-58			1958-59		
	Actual	Expenditure		Actual	Expenditure		Actual	Expenditure		Estimate	Actual	Expenditure
<b>I. MILITARY PERSONNEL COSTS</b>												
Pay and Allowances.....	(3)	61,067		67,093			74,508			76,365		76,867
Travelling and Removal Expenses.....	(5)	6,845		6,819			6,517			6,016		6,039
Medical and Dental Consultants and Special Services.....	(4)	384		439			452			452		473
Clothing, Personal Equipment.....	(12)	2,940		2,023			1,312			1,800		2,546
Food Supplies.....	(12)	5,345		5,808			5,586			6,138		6,442
Medical and Dental Supplies.....	(12)	315		293			381			287		287
Laundry and Dry Cleaning.....	(22)	106		110			126			125		145
Sub Total.....		77,002		82,591			88,716			91,277		92,599
<b>II. ALL OTHER OPERATING COSTS</b>												
Civil Salaries and Wages.....	(1)	29,275		33,021			39,877			40,371		40,789
Civilian Allowances.....	(2)	27		26			30			35		31
Freight, Express and Cartage.....	(6)	1,111		1,093			942			1,200		880
Postage.....	(7)	115		119			122			125		106
Telephones, Telegrams and Other Communication Services.....	(8)	567		616			552			601		579
Printing of Departmental Reports and Other Publications.....	(9)	1,020		537			594			694		522
Films, Displays, Broadcasting, Advertising, etc.....	(10)	305		298			257			200		184
Office Stationery, Supplies, Equipment & Furnishings.....	(11)	1,382		782			931			850		1,032
Repairs and Upkeep of Buildings and works including Land.....	(14)	3,874		4,360			1,841			1,937		2,597
Rentals of Land, Buildings and Works.....	(15)	30		36			45			80		79
Municipal and Public Utility Services.....	(19)	1,719		1,868			1,867			1,900		2,304
Pensions, Superannuation, Benefits for Personal Services.....	(21)	271		300			318			375		322
Corps of Commissionaires and Other Services.....	(4)	1,539		1,607			1,718			1,777		1,854
Professional Fees—Architects, engineers, etc.....	(4)	586		325			295			250		374
Fees for Special Courses.....	(4)	352		1,798			984			2,280		2,337
Fuel for Heating, Cooking and Power Generating Units.....	(12)	1,741		1,979			1,864			2,000		1,803
Gasoline, Fuel Oil and Lubricants.....	(12)	4,957		5,219			6,801			6,500		6,473
Miscellaneous Materials and Supplies.....	(12)	12,594		10,139			9,809			10,123		9,521
Barrack, Hospital and Camp Stores.....	(12)	1,906		1,633			974			1,000		853
Repairs and Upkeep of Equipment.....	(17)	21,248		19,681			17,934			20,944		19,508
Expenditures not elsewhere provided.....	(22)	748		705			565			1,000		1,029
Sub Total.....		85,367		86,142			88,320			94,222		93,182

Sub Total.....

93,182

### III. MILITARY AND OTHER CONSTRUCTION

Purchase of Real Properties (Land and Buildings)..... (13)

Construction—Major Contract Projects..... (13)

Construction—Day Labour and Minor Contract Projects..... (13)

	139	58	107	50	62
	10,528	8,966	6,887	10,900	7,076
	872	961	608	550	406
Sub Total.....	11,539	9,985	7,572	11,500	7,544

### IV. MAJOR PROCUREMENT AND PRODUCTION COSTS

Ships.....	72,261	76,857	56,395	30,167	36,791
Aircraft and Engines.....	49,678	37,123	28,186	22,645	22,422
Mechanical Equipment including Transport.....	837	1,011	227	1,000	973
Armament Equipment.....	15,687	8,186	7,640	8,173	4,608
Signal and Wireless Equipment.....	17,482	15,672	9,524	14,858	6,779
Special Training Equipment.....	144	72	276	302	216
Miscellaneous Technical Equipment.....	611	706	820	600	569
Ammunition and Bombs.....	10,200	8,354	7,313	6,871	7,277
Sub Total.....	166,900	147,981	110,381	84,616	79,635

Total Cash Disbursements.....	340,808	326,699	294,989	281,615	272,960
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Deduct—Transfers of Current Production to Mutual Aid.....	1,566	14	32,114	30,058	21,615
Expenditures from Special Accounts..... (34)	—	—	313	—	37,446

NET BUDGETARY EXPENDITURE.....	339,242	326,685	262,562	251,557	213,899
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DEPARTMENT OF NATIONAL DEFENCE—ARMY  
COMPARISON OF EXPENDITURES  
(thousands of dollars)

Cost Categories	1955-56			1956-57			1957-58			1958-59		
	Actual	Expenditure		Actual	Expenditure		Actual	Expenditure		Estimate	Actual	Expenditure
<b>I. MILITARY PERSONNEL COSTS</b>												
Pay and Allowances.....	(3)	154,966		170,254			185,473			183,880	183,330	
Travelling and Removal Expenses.....	(5)	19,754		16,643			21,504			13,915	15,356	
Medical and Dental Consultants and Special Services.....	(4)	2,731		2,634			2,430			2,476	2,540	
Clothing, Personal Equipment.....	(12)	9,181		4,759			3,452			4,200	10,911	
Food Supplies.....	(12)	9,956		9,613			8,855			9,515	9,340	
Medical and Dental Supplies.....	(12)	984		942			878			1,000	907	
Laundry and Dry Cleaning.....	(22)	965		984			1,030			1,000	1,011	
Sub-Total.....		198,537		205,829			223,622			215,986	223,395	
<b>II. ALL OTHER OPERATING COSTS</b>												
Civil Salaries and Wages.....	(1)	53,785		58,322			63,435			64,425	65,482	
Civilian Allowances.....	(2)	480		613			636			622	773	
Freight, Express and Cartage.....	(6)	6,794		5,224			4,994			4,432	3,190	
Postage.....	(7)	357		340			343			350	314	
Telephone, Telegrams and Other Communication Services.....	(8)	1,469		1,665			1,829			1,673	1,568	
Printing of Departmental Reports and Other Publications.....	(9)	737		868			864			800	814	
Films, Displays, Broadcasting, Advertising, etc.....	(10)	1,296		1,043			2,467			700	660	
Office Stationery, Supplies, Equipment and Furnishings.....	(11)	3,102		2,044			10,655			10,000	2,002	
Repairs and Upkeep of Buildings and Works.....	(14)	10,402		10,417			2,072			2,250	12,398	
Municipal and Public Utility Services.....	(15)	1,978		2,025			4,767			4,737	5,121	
Pensions, Superannuation, Benefits for Personal Services.....	(21)	3,910		4,721			515			524	523	
Corps of Commissioners and Other Services.....	(4)	473		493			3,662			3,950	4,316	
Professional Fees—Architects, engineers, etc.....	(4)	2,638		3,026			1,359			1,300	1,737	
Fees for Special Courses.....	(4)	2,653		2,163			386			400	387	
Fuel for Heating, Cooking and Power Generating Units.....	(12)	7,061		7,783			7,779			7,916	6,909	
Gasoline, Fuel Oil and Lubricants.....	(12)	2,720		2,512			2,650			2,500	2,273	
Miscellaneous Materials and Supplies.....	(12)	4,250		3,232			2,863			2,700	2,270	
Barrack, Hospital and Camp Stores.....	(12)	4,724		4,089			3,322			1,700	1,987	
Repairs and Upkeep of Equipment.....	(17)	10,794		9,867			10,276			10,500	7,408	
Expenditures not elsewhere provided.....	(22)	2,580		2,547			2,961			2,500	2,800	
Sub-Total.....		122,675		123,461			128,439			125,579	125,200	



## III. MILITARY AND OTHER CONSTRUCTION

Purchase of Real Properties (land and Buildings).....	(13)	1,711	1,370	534	200	1,313
Construction—Major Contract Projects.....	(13)	70,070	74,835	43,997	43,045	41,055
Construction—Day Labour and Minor Contract Projects.....	(13)	3,024	2,753	2,189	2,500	2,191
Sub-Total.....		74,805	78,958	46,720	45,745	44,559

## IV. MAJOR PROCUREMENT AND PRODUCTION COSTS

Tanks and A.F.V.'s.....	(16)	2,205	699	164	80	33
Mechanical Equipment.....	(16)	18,681	11,351	3,419	5,061	2,430
Armament Equipment.....	(16)	7,144	5,053	8,450	9,348	7,848
Signal and Wireless Equipment.....	(16)	3,953	2,243	898	6,274	1,509
Special Training Equipment.....	(16)	122	90	153	100	77
Miscellaneous Technical Equipment.....	(16)	1,952	1,335	1,416	3,260	1,818
Ammunition and Bombs.....	(16)	31,364	30,433	11,323	25,748	25,984
Sub-Total.....		65,421	51,204	25,823	49,871	39,699

## Total Cash Disbursements.....

	461,438	459,452	424,654	437,181	432,853
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## Deduct—Transfers of Current Production to Mutual Aid.....

	113	23,271	21,937	26,299	22,588
—Expenditures from Special Accounts.....	(34)	54,542	47,508	24,056	49,871
					39,699

## NET BUDGETARY EXPENDITURE.....

	406,783	388,673	378,661	361,011	370,556
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DEPARTMENT OF NATIONAL DEFENCE—RCAF  
COMPARISON OF EXPENDITURES  
(thousands of dollars)

Cost Categories	1955-56			1956-57			1957-58			1958-59		
	Actual	Expenditure		Actual	Expenditure		Actual	Expenditure		Estimate	Expenditure	
<b>I. MILITARY PERSONNEL COSTS</b>												
Pay and Allowances.....	(3)	150,364		174,391			196,636			198,260	203,544	
Travelling and Removal Expenses.....	(5)	18,015		19,052			19,203			16,150	15,568	
Medical and Dental Consultants and Special Services.....	(4)	2,234		2,393			2,240			2,205	2,109	
Clothing, Personal Equipment.....	(12)	7,913		6,122			4,606			3,267	7,370	
Food Supplies.....	(12)	8,930		8,420			8,295			8,419	8,163	
Medical and Dental Supplies.....	(12)	872		848			820			751	796	
Laundry and Dry Cleaning.....	(22)	623		628			708			683	724	
Sub-Total.....		188,951		211,854			232,508			229,735	238,274	
<b>II. ALL OTHER OPERATING COSTS</b>												
Civil Salaries and Wages.....	(1)	37,836		43,418			46,431			49,035	48,489	
Civilian Allowances.....	(2)	164		172			176			123	172	
Freight, Express and Cartage.....	(6)	11,129		25,866			10,380			4,238	4,134	
Postage.....	(7)	335		338			322			348	298	
Telephones, Telegrams and Other Communication Services.....	(8)	4,324		4,178			4,405			4,919	4,402	
Printing of Departmental Reports and Other Publications.....	(9)	617		673			774			748	811	
Films, Displays, Broadcasting, Advertising, etc.....	(10)	776		843			717			575	572	
Office Stationery, Supplies, Equipment and Furnishings.....	(11)	2,611		2,216			2,231			2,302	1,577	
Repairs and Upkeep of Buildings and Works including Land.....	(14)	10,766		15,392			14,163			15,000	13,203	
Rentals of Land, Buildings and Works.....	(15)	1,892		4,612			2,550			3,271	3,177	
Municipal and Public Utility Services.....	(19)	5,169		5,922			6,370			6,475	6,653	
Pensions, Superannuation, Benefits for Personal Services.....	(21)	356		395			400			450	412	
Corps of Commissionaires and Other Services.....	(4)	2,389		2,982			3,406			4,942	4,065	
Professional Fees—Architects, Engineers, etc.....	(4)	8,680		16,041			5,347			1,100	1,586	
Fees for Special Courses.....	(4)	2,291		1,345			2,159			2,227	1,725	
Mid-Canada Line—Maintenance by Contract.....	(4)	—		—			17,254			22,000	19,108	
Fuel for Heating, Cooking and Power Generating Units.....	(12)	8,061		9,305			8,777			8,123	7,709	
Gasoline, Fuel Oil and Lubricants.....	(12)	33,619		31,894			31,998			34,640	30,852	
Miscellaneous Materials and Supplies.....	(12)	4,654		5,592			6,630			6,181	6,456	
Barrack, Hospital and Camp Stores.....	(12)	4,231		4,184			2,765			2,349	1,924	
Repairs and Upkeep of Equipment.....	(17)	111,032		126,094			135,623			122,540	120,126	
Expenditures not elsewhere provided.....	(22)	1,238		1,581			962			1,089	964	
Sub-Total.....		252,170		303,043			303,849			292,675	278,415	

## III. MILITARY AND OTHER CONSTRUCTION

Purchase of Real Properties (Land and Buildings).....(13)  
 Construction—Major Contract Projects.....(13)  
 Construction—Day Labour and Minor Contract Projects.....(13)

	1,930	1,961	1,717	1,455	398
	67,968	115,026	46,775	36,000	19,286
	3,298	3,717	3,764	2,700	2,250
Sub-Total.....	73,196	120,704	52,256	40,155	21,934

## IV. MAJOR PROCUREMENT AND PRODUCTION COSTS

Aircraft and Engines.....(16)  
 Mechanical Equipment including Transport.....(16)  
 Armament Equipment.....(16)  
 Signal and Wireless Equipment.....(16)  
 Special Training Equipment.....(16)  
 Miscellaneous Technical Equipment.....(16)  
 Ammunition and Bombs.....(16)

	234,546	174,832	178,854	246,929	205,976
	4,267	4,409	6,094	5,000	5,758
	339	874	712	2,323	1,196
	20,269	31,534	10,229	17,340	19,543
	4,312	4,161	3,057	5,519	2,787
	4,219	5,400	6,065	6,619	4,387
	15,979	6,289	20,144	23,720	19,196
Sub-Total.....	283,931	227,499	225,155	307,450	258,843
Total Cash Disbursements.....	798,248	863,100	813,768	870,015	797,466

## Deduct—Transfers of Equipment charged to Mutual Aid.....

—NATO Air Training.....(34)  
 —Expenditures from Special Accounts.....(34)

	36,553	40,393	24,349	41,643	6,348
	51,056	47,753	26,418	9,000	6,746
	5,623	—	3,040	30,000	159,944
NET BUDGETARY EXPENDITURE.....	705,016	774,954	759,961	739,372	624,428



DEPARTMENT OF NATIONAL DEFENCE  
COMPARISON OF EXPENDITURES  
DRB, Administration, Inspection Services, Mutual Aid and Other  
(thousands of dollars)

(thousands of dollars)					
	1955-56 Actual Expenditure	1956-57 Actual Expenditure	1957-58 Actual Expenditure	Estimate	Actual Expenditure
DEFENCE RESEARCH BOARD					
Research					
Civil Salaries and Wages.....	9,636	10,834	12,085	13,022	12,751
Other Operating Costs.....	5,682	7,518	8,386	7,243	8,738
Construction.....	1,395	2,028	1,969	2,640	2,220
Equipment.....	14,834	3,715	2,802	3,980	2,908
Total Research.....	31,547	24,095	25,242	26,885	26,617
Development					
Navy.....	2,793	2,841	2,254	3,740	2,405
Army.....	3,646	3,929	4,757	3,900	2,637
Air.....	26,372	38,458	46,413	48,000	42,701
Total Development.....	32,811	45,228	53,424	55,640	47,743
Total Research and Development.....	64,358	69,323	78,666	82,525	74,360
DEPARTMENTAL ADMINISTRATION					
Civil Salaries and Wages.....	2,360	2,567	2,726	2,845	2,623
Civilian Allowances.....	26	17	21	20	23
Professional and Special Services.....	20	29	13	10	3
Travelling and Removal Expenses.....	145	148	160	150	135
Postage.....	66	54	54	55	48
Telephones, Telegrams and Other Communication Services.....	10	9	8	12	7
Publication of Departmental Reports and Other Material.....	96	58	53	48	29
Office Stationery, Supplies, Equipment and Furnishings.....	104	83	81	72	45
Materials and Supplies.....	69	20	30	30	33
Miscellaneous Equipment.....	12	23	21	7	3
Pensions, Superannuation and Other Benefits for Personal Services.....	1	—	—	1	1
All Other Expenditures.....	55	56	74	110	45
Total Administration.....	2,964	3,064	3,241	3,360	2,995
Total Administration.....					

## INSPECTION SERVICES

Civil Salaries and Wages.....	(1)	6,717	6,511	6,196	6,172	5,778
Pay and Allowances.....	(3)	110	113	114	140	91
Professional and Special Services.....	(4)	188	199	115	110	53
Travelling and Removal Expenses.....	(5)	351	294	264	300	240
Freight, Express and Cartage.....	(6)	26	15	12	15	13
Postage.....	(7)	13	13	11	13	9
Telephones, Telegrams and Other Communication Services.....	(8)	54	45	39	45	40
Office Stationery, Supplies, Equipment and Furnishings.....	(11)	78	36	36	39	33
Materials and Supplies.....	(12)	194	201	125	162	116
Acquisition and Construction of Buildings and Works including Acquisition of Land: Purchase of Real Properties (Land and Buildings).....	(13)	—	—	133	430	451
Construction of Buildings and Works						
Major Contract Projects.....	(13)	441	98	17	98	—
Day Labour and Minor Contract Projects.....	(13)	—	—	10	27	12
Repairs and Upkeep of Buildings and Works.....	(14)	27	19	46	12	12
Rentals of Land, Buildings and Works.....	(15)	2	2	2	3	2
Acquisition or Construction of Equipment.....	(16)	452	487	451	440	217
Repairs and Upkeep of Equipment.....	(17)	20	32	42	52	21
Municipal and Public Utility Services.....	(19)	19	18	21	20	19
Pensions, Superannuation and Other Benefits for Personal Services.....	(21)	2	2	2	2	2
All Other Expenditures.....	(22)	3	3	3	3	3
Total Inspection Services.....		8,697	8,088	7,639	8,083	7,112

## MUTUAL AID

Procurement for Mutual Aid.....		15,758	8,081	3,179	1,500	1,009
Transfers to NATO Countries of Equipment from Services Stocks.....		97,611	63,679	78,399	98,000	50,551
NATO Aircrew Training.....		51,056	47,753	26,418	9,000	6,746
Contributions to Infrastructure and NATO Budgets.....		10,541	14,040	10,468	21,500	12,406
Total Mutual Aid.....		174,966	133,553	118,464	130,000	70,712

## OTHER

Defence Expenditures by Other Government Departments.....		2,029	2,169	2,757	4,469	3,704
Grants to Military Associations etc.....		270	273	282	259	259
Grants to the Town of Oromocto.....		—	—	350	961	960
Pensions and Other Benefits etc.....		45,787	52,645	55,879	55,615	55,747
Total Other.....		48,086	55,087	59,268	61,304	60,670





## ORDER OF REFERENCE

THURSDAY, May 12, 1960.

*Ordered*,—That the name of Mr. Macdonald (*Kings*) be substituted for that of Mr. MacEwan on the Special Committee on Defence Expenditures.

Attest.

LÉON-J. RAYMOND,  
*Clerk of the House.*



## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

FRIDAY, May 13, 1960.

(3)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Lambert, Macdonald (*Kings*), Parizeau, Smith (*Calgary South*), Webster, Winch—13.

*In attendance:* Honourable George R. Pearkes, Minister of National Defence; Mr. F. R. Miller, Deputy Minister; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns; Rear Admiral R. A. Wright, Naval Controller; Mr. R. J. Mulligan, Assistant to the Naval Controller, and Colonel F. E. Anderson, Director, Army Budget.

The Committee resumed from Wednesday, May 11, the adjourned consideration of the Expenditures of the Department of National Defence for the fiscal year 1958-59.

The Minister, Messrs. Miller and Armstrong were questioned thereon.

A statement respecting employment of casual labour during the fiscal years 1957-58, 1958-59, 1959-60 was filed in answer to a question by Mr. Winch on Wednesday, May 11.

A statement respecting expenditures to 31st March, 1959, on Destroyer Escort Shipbuilding Program was also filed.

It was agreed that both statements would be taken as read and incorporated in the printed record of Evidence.

And the consideration of the Expenditures of the Department of National Defence for 1958-59 still continuing, it was, on motion of Mr. Chambers, adjourned to the next meeting.

Hon. G. R. Pearkes, V.C., Minister of National Defence, presented to the Committee a document entitled "Information for the Special Committee on Defence Expenditures", dated May, 1960.

At 10.55 o'clock a.m., the Committee adjourned.

Antoine Chassé,  
Clerk of the Committee.





## EVIDENCE

FRIDAY, May 13, 1960.  
9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. Before we proceed with the questioning I would like, on your behalf, to welcome John A. Macdonald, who is replacing Mr. MacEwan on this committee. We are happy to have you, Mr. Macdonald.

Mr. Winch, the department has given us the answer to your question on the amount of casual labour, et cetera. Is it all right with you if we print it as evidence? Is that agreed, gentlemen?

Agreed.

### DEPARTMENT OF NATIONAL DEFENCE

#### EMPLOYMENT OF CASUAL LABOUR DURING THE FISCAL YEARS 1957-58, 1958-59 AND 1959-60

Service and Function	Fiscal Years		
	1957-58	1958-59	1959-60
	Mandays		
Royal Canadian Navy			
Ship Repair.....	256,583	278,011	328,093
Construction and Maintenance of Works and Buildings	63,370	96,873	81,673
Ordnance.....	3,540	5,446	4,000
Supply.....	8,591	8,211	7,286
Summer Training.....	8,074	8,119	8,086
Canadian Army			
Construction and Maintenance of Works and Buildings	386,452	461,998	394,947 (Est.)
Summer Training.....	173,349	138,892	112,138
Royal Canadian Air Force			
Construction and Maintenance of Works and Buildings	497,890	574,009	490,530
Supply.....	38,668	35,972	16,711 (Est.)
Summer Training.....	18,978 (Est.)	20,000 (Est.)	21,540
<b>TOTAL.....</b>	<b>1,455,495</b>	<b>1,627,531</b>	<b>1,465,004</b>

May 13, 1960.

The CHAIRMAN: You will recall, gentlemen, that we had carried the first three items, pay and allowances, travelling and removal expenses, and medical and dental consultants and special services. Just before the adjournment at the last meeting, Mr. Carter was still on some of the aspects of clothing, personal equipment. Are there any further questions? Will it carry, gentlemen? That is clothing, personal equipment. That is under military personnel costs. Are there any questions on item No. 4? Shall it carry?

Agreed.

The CHAIRMAN: Then we get on to food supplies. Is there any questioning on food supplies? Shall it carry?

Agreed.

The CHAIRMAN: Medical and dental supplies: actual expenditures of \$287 million, compared with an estimate of \$381 million. Are there any questions?

Mr. FAIRFIELD: It is \$287,000.

The CHAIRMAN: Yes, \$287,000.

Mr. SMITH (*Calgary South*): You just lost a decimal, that is all, Mr. Chairman.

The CHAIRMAN: That is all. Shall that item carry?

Agreed.

The CHAIRMAN: Laundry and dry cleaning.

Mr. WINCH: There is one question on that, Mr. Chairman. I would like to ask if, on laundry and dry cleaning, that is always done within the establishment; and if it is outside the establishment, do you use the services of equipment which is available at, say, our military hospitals, who always have large establishments for laundry and dry cleaning?

Or is it always done—

The CHAIRMAN: Mr. Winch, your question is: is it done on a contract basis outside, or is it done with our own facilities? Is that right?

Mr. WINCH: That is right.

Hon. G. R. PEARKES (*Minister of National Defence*): Wherever possible, it is done by contract. A very large proportion of it is done by contract. We have only limited facilities ourselves.

The CHAIRMAN: Shall that item carry?

Agreed.

The CHAIRMAN: No. 1, military personnel costs, has been dealt with. Now we come to section II, all other operating costs.

The first item is civil salaries and wages. That is item 1, section II. Are there any questions, gentlemen? Shall it carry?

Agreed.

The CHAIRMAN: Item 2, civilian allowances. Are there any questions? Shall it carry?

Agreed.

The CHAIRMAN: Item 3, freight, express and cartage. Are there any questions? Shall it carry?

Agreed.

The CHAIRMAN: Item 4, postage. Questions? Shall it carry?

Agreed.

The CHAIRMAN: Telephones, telegrams and other communication services. Questions? Carried?

Agreed.

The CHAIRMAN: Printing of departmental reports and other publications. Questions? Carry?

Agreed.

The CHAIRMAN: Films, displays, broadcasting, advertising, et cetera.

Mr. WINCH: Mr. Chairman, may we ask what the broadcasting is, and whether that and advertising is required for recruitment purposes?

Mr. PEARKES: That is correct.

Mr. WINCH: Broadcasting too?

Mr. PEARKES: Broadcasting could be put under the heading of recruiting and public relations—information.



Mr. WINCH: In view of the fact that we were told at the last meeting that you were doing very well on recruiting and are just about up to your ceiling, do you contemplate that this amount is now required?

The CHAIRMAN: This is 1958-59, Mr. Winch, as you recall. They actually spent less than they had estimated.

Mr. SMITH (*Calgary South*): Mr. Chairman, Mr. Winch really brings into perspective the problem of procedure that we have. Just so that we have an understanding from the Chair, I gather that you wish to defer any questions on what has currently taken place until we come to the 1960-61 estimates?

The CHAIRMAN: That is right. We will go over the estimates of 1960-61 when this comparison of expenditures and estimates of 1958-59 is finished. Then, should there be any questions on 1959-60, we can cover them as we are going over 1960-61. Is that satisfactory?

Mr. PEARKES: Perhaps I might explain here that this reduction was deliberate at this time. The recruiting was going well, and we were therefore able to reduce the amount of advertising in that particular year.

The CHAIRMAN: Are there any further questions? Shall the item carry? Agreed.

The CHAIRMAN: Office stationery, supplies, equipment and furnishings. Any questions? Carry?

Agreed.

The CHAIRMAN: Repairs and upkeep of buildings and works, including land. Questions?

Mr. CHAMBERS: Mr. Chairman, is there anything special in the amount over the estimate?

The CHAIRMAN: An estimate of \$1,937,000, expenditures \$2,597,000.

Mr. PEARKES: Towards the end of that year it was found advisable to increase the amount of work which was being done on the maintenance of the buildings. There is no new construction here, but some of the buildings had run down, and the increase in the estimate is largely due to the fact that a good deal of this work was done during the winter months, rather than in the summer months.

Mr. WINCH: Mr. Chairman, I would like to ask a question on that. With regard to the maintenance that was just mentioned by the minister, is it all done directly by the department, or do you have any agreements with the Department of Public Works on this kind of work, repairs and maintenance?

Mr. PEARKES: Maintenance is done in two ways, either by letting contracts for the maintenance, or by day labour, where the individuals are hired locally and are under the supervision of the particular service to carry out minor maintenance, anything such as painting, and some minor carpentry. That is done by casual labour, hired locally.

The CHAIRMAN: Do you have any further questions, Mr. Winch?

Mr. WINCH: No, Mr. Chairman.

The CHAIRMAN: Carried?

Agreed.

The CHAIRMAN: Item 15, rentals of land, buildings, and works. Questions? Carry?

Agreed.

The CHAIRMAN: Item 19, municipal and public utility services. Questions? Carry?

Agreed.

The CHAIRMAN: Item 21, pensions, superannuation, benefits for personal services.

Mr. WINCH: I would like to ask the minister a question under benefits, Mr. Chairman. With regard to naval personnel who are on duty afloat, are their families covered for family allowances? And if not, why not?

Mr. E. B. ARMSTRONG (*Assistant Deputy Minister, Finance Division, Department of National Defence*): Yes, the people afloat are covered. Family allowances apply to members of the naval service who are afloat. They are based, of course, in Canada, and the allowances apply.

The CHAIRMAN: Thank you, Mr. Armstrong. Do you have any further questions, Mr. Winch?

Mr. WINCH: Even if they are afloat a long way off, they are considered as being stationed in Canada, so they get the family allowances?

Mr. ARMSTRONG: That is correct.

Mr. PEARKES: The family in Canada, yes.

Mr. WINCH: Perhaps I will get what I want when we come to the army and the air force.

The CHAIRMAN: Corps of commissionaires and other services; an expenditure of \$374,000 against an estimate of \$250,000. Are there any questions?

Mr. WINCH: I would like to ask a question on that, Mr. Chairman. What is the policy as regards the civilian guards who are used at many of our depots, in view of the fact that over the past several years there seems to have been quite often a change from the use of veterans as such to the corps of commissionaires, who do not pay the same as you pay when you use the veteran? What is the policy in this regard?

Mr. PEARKES: The corps of commissionaires is an organization which, as I think hon. members know, is nation-wide. It was originated soon after the first World War, in order to provide employment for old soldiers. There was a scarcity of jobs. They assist veterans to obtain employment, such as security guards, provide them with uniforms and change the personnel frequently on any particular job. So we are—as have many other government departments—hiring from the corps of commissionaires so much work to be done.

The actual personnel who are employed on these guard duties may be changed and rotated by the corps of commissionaires. We have found that they have supplied first-class men. I think it is only natural that the salaries paid by the corps of commissionaires to these old soldiers are rather less than the ordinary wages paid for ordinary labour in the community. If you pay the old soldiers wages which are in excess, or as high as those paid to younger men, employers generally would not hire the commissionaire or the veteran. So we have to conform to the general salaries paid by the corps of commissionaires.

Mr. SMITH (*Calgary South*): In other words, you are providing a source of employment for veterans at a lower rate than you could do it yourself, using military personnel?

Mr. PEARKES: Very definitely.

Mr. WINCH: I do not mean that. I certainly have no criticism of the corps of commissionaires; I know they do a wonderful job. But my question is directed at this, where you had civilian veterans who were doing guard duty or security duty. What I have not quite been able to understand is, why the change-over from the employment of the veterans, who were not the corps of commissionaires. You let them out and take on the corps of commissionaires. Those men, if they continue as a member of the corps of commissionaires, do the same job at less money than they were previously getting.

As you know, that has been the situation. It just does not strike me as being right. They are both veterans, whether they are in or out of the corps of commissionaires—and they are doing the same work, but there is a difference in salary.

Mr. PEARKES: There was a small group of security guards that was hired for the navy, for guard duties, around dockyards. I am not quite certain whether or not any of those were kept on at this period. But this was just about the time when it was found more satisfactory to employ commissionaires. The ex-naval personnel who were employed as security guards for the navy were, in nearly all cases, I believe, absorbed into the corps of commissionaires, or given other work.

Mr. WINCH: That is just my point: but at a lower rate of pay. I do not like to see them going down in salary, because they do not get paid much anyway.

The CHAIRMAN: Are there any further questions, gentlemen? Carried? Agreed.

The CHAIRMAN: Professional fees—architects, engineers, et cetera. An expenditure of \$374,000; estimate, \$250,000. Questions? Carry?

Agreed.

The CHAIRMAN: Fees for special courses; expenditure \$2,337,000, against an estimate of \$2,260,000. Questions?

Mr. WEBSTER: What is that for?

Mr. PEARKES: There are a very large number of special courses which are conducted in order to keep naval personnel abreast of scientific developments. Some of these courses take place in the United Kingdom, some in the United States, and some in Canadian universities. It is all part of the training program for naval personnel.

The CHAIRMAN: Is that carried, gentlemen?

Agreed.

The CHAIRMAN: Item 12, fuel for heating, cooking and power generating units—an under-expenditure. Are there any questions? Carried?

Agreed.

The CHAIRMAN: Gasoline, fuel oil and lubricants.

Mr. SMITH (*Calgary South*): Mr. Chairman, may I ask either the minister or his officials—recognizing that defence production makes most of the procurements for this item—whether or not there was any attempt in this item to buy Canadian products, where the prices were competitive?

Mr. PEARKES: To buy?

Mr. SMITH (*Calgary South*): To buy a Canadian product, where the prices were competitive, rather than using foreign sources?

Mr. PEARKES: Yes, wherever possible, where the prices are comparable, we purchase Canadian.

Mr. SMITH (*Calgary South*): It is correct to say, though, Mr. Minister, that defence production does make all your large procurements, such as are supplied at Churchill, and so on?

Mr. PEARKES: Defence production places the contract for all these, but we stipulate that as far as possible they should be Canadian products.

The CHAIRMAN: Your specifications are such?

Mr. PEARKES: We give the specifications, and that is included.

The CHAIRMAN: Are there any further questions, gentlemen? Carried?

Agreed.



The CHAIRMAN: Miscellaneous materials and supplies—a saving. Any questions? Carried?

Agreed.

The CHAIRMAN: Barrack, hospital and camp stores—a saving. Any questions? Carried?

Agreed.

The CHAIRMAN: Repairs and upkeep of equipment—a saving. Any questions? Shall it carry?

Agreed.

The CHAIRMAN: Expenditures not elsewhere provided, the miscellaneous item. They are just about on the nose. Are there any questions? Carried?

Agreed.

The CHAIRMAN: Military and other construction, purchase of real properties, land and buildings; expenditures of \$62,000; an estimate of \$50,000. Any questions?

Mr. WINCH: Is this the year where you included the purchase of land for the armouries in Vancouver?

Mr. PEARKES: No, this is dealing with navy only.

Mr. WINCH: I am sorry; I get mixed with them.

The CHAIRMAN: That is all right, Mr. Winch. Carried?

Agreed.

The CHAIRMAN: Construction—major contract projects; an expenditure of \$7 million, compared with an estimate of \$10,900,000. Any questions?

Mr. CARTER: The minister explained that.

The CHAIRMAN: Mr. Minister, would you explain to Mr. Carter why there is that saving.

Mr. CARTER: I think it has already been explained. The minister explained it in his statement.

Mr. PEARKES: We may be able to give you—

Mr. CARTER: I am not asking for an explanation; I am perfectly willing to take the explanation the minister gave.

The CHAIRMAN: Thank you very much, Mr. Carter. Carried?

Agreed.

The CHAIRMAN: Construction—day labour and minor contract projects. That is an actual saving.

Agreed.

The CHAIRMAN: We jump to section IV, major procurement and production costs. This is vote 16, ships.

Mr. WINCH: Mr. Chairman, is this where we can ask the minister for the policy of that year on ships, what type of ships?

Mr. PEARKES: I have a list of the ships which were under construction in these years.

They were the first seven of the *Restigouche* class of ship. They consisted of the *Chaudiere*, which was built at the Halifax yards; the *Gatineau*, built at the Davie Shipbuilding yards; the *St. Croix*, built at the Marine Industries yards; the *Restigouche*, built by Canadian Vickers; the *Kootenay*, built at the Burrard Drydock; the *Terra Nova*, built at the Victoria Machinery Depot; and the *Columbia*, built at the Burrard Drydock.



The construction of these ships was allocated to the various shipyards across Canada by the maritime commission. They are not let out for contract because if they were let out for contract they might possibly all go to one shipyard; and it is very desirable that the shipyards we have on the two coasts should be given a reasonable amount of work in peace time, so that they would be available in the event of a disaster. All these ships have now been commissioned and are in operation.

Mr. SMITH (*Calgary South*): I think this is where we had some difficulty with the department two years ago, in endeavouring to ascertain the accounting principles of the department and the methods by which accounts for the payment of these ships was to be made?

Mr. PEARKES: Yes, the difficulty is that the shipyards are not able to put in their accounts quickly. Therefore, you get carry-overs of amounts for one year to another; and it is thus very difficult to assess the actual amount, or to give a definite figure as to the amount which was payable.

Mr. SMITH (*Calgary South*): In some years this delay has been about three years, as I recall it from the evidence.

Mr. PEARKES: That is correct. We could, if you wish, give you the expenditures on these various ships to date.

The CHAIRMAN: These are actual expenditures to date, right here, sir.

Mr. PEARKES: But I meant on each individual ship.

The CHAIRMAN: Would you like that information, Mr. Forgie?

Mr. FORGIE: Yes, to see what the relative prices are.

Mr. PEARKES: Would you like me to read it out, or would you like it put on the record?

The CHAIRMAN: We could place it on the record, to save time. Is that agreeable, gentlemen?

Agreed.

ROYAL CANADIAN NAVY  
DESTROYER ESCORT SHIPBUILDING PROGRAM—(14 SHIPS)

No.	Name	Builder	Expenditures
			to 31 March 1959
			\$
205	<i>St. Laurent</i> .....	Canadian Vickers Ltd.....	14,319,847
206	<i>Saguenay</i> .....	Halifax Shipyards Ltd.....	17,595,874
207	<i>Skeena</i> .....	Burrard Drydock.....	18,758,868
229	<i>Ottawa</i> .....	Canadian Vickers Ltd.....	16,261,337
230	<i>Margaree</i> .....	Halifax Shipyards Ltd.....	18,649,809
233	<i>Fraser</i> .....	Yarrow's Ltd.....	17,803,174
234	<i>Assiniboine</i> .....	Marine Industries Ltd.....	18,856,689
235	<i>Chaudiere</i> .....	Halifax Shipyards Ltd.....	17,872,289
236	<i>Gatineau</i> .....	Davie Shipbuilding Ltd.....	18,100,475
256	<i>St. Croix</i> .....	Marine Industries Ltd.....	19,430,901
257	<i>Restigouche</i> .....	Canadian Vickers Ltd.....	18,653,723
258	<i>Kootenay</i> .....	Burrard Drydock.....	19,459,594
259	<i>Terra Nova</i> .....	Victoria Machinery Depot.....	21,127,603
260	<i>Columbia</i> .....	Burrard Drydock.....	17,252,516
			254,142,699

The CHAIRMAN: Are there any further questions on major procurements and production costs, ships? Carried?

Agreed.

The CHAIRMAN: Aircraft and engines. That is just about on the nose—\$22,400,000 actual, and \$22,600,000 estimate. Carried?

Agreed.

Mr. SMITH (*Calgary South*): Mr. Chairman, I wonder if just before we go on; Mr. Minister, regarding the maintenance for the piston-driven aircraft, could this also be filed with the evidence? I mean, the maintenance cost for the year, for maintaining our piston-driven training aircraft?

Mr. PEARKES: This is dealing only with the navy.

The CHAIRMAN: The maintenance costs?

Mr. SMITH (*Calgary South*): Please.

Mr. PEARKES: We will produce that next time.

Mr. CHAIRMAN: That is fine. Thank you very much, sir.

Mechanical equipment, including transport. That is a little under estimate. Carried?

Agreed.

The CHAIRMAN: Armament equipment. That is quite a piece under the estimate.

Mr. LAMBERT: That was explained by the minister.

Agreed.

The CHAIRMAN: Signal and wireless equipment. That too, I think, was in your explanation, was it not, sir?

Mr. PEARKES: Yes.

The CHAIRMAN: Carried?

Agreed.

The CHAIRMAN: Special training equipment. Carried?

Agreed.

The CHAIRMAN: Miscellaneous technical equipment. Carried?

Agreed.

The CHAIRMAN: Ammunition and bombs.

Mr. WINCH: Any nuclear warheads there?

Mr. PEARKES: No nuclear warheads.

Mr. CHAMBERS: You could not get them at these prices.

The CHAIRMAN: Carried?

Agreed.

The CHAIRMAN: That pretty well completes the navy. Now, if you will turn to the army—

Mr. LAMBERT: Regarding the transfers of current production to mutual aid—

The CHAIRMAN: That is still on your navy sheet, gentlemen.

Mr. LAMBERT: There was quite a large estimate, and the actual expenditure was somewhat less.

With this program, is there still quite a reserve, or likely to be a reserve for transfer for this purpose?

Mr. PEARKES: Do you mean, in actual ships or materials?

Mr. LAMBERT: Yes, both.

Mr. PEARKES: I think we have two ships. I think they are the *Algerine* class.

At this time we transferred quite a number of ships to Turkey, under the mutual aid program; and I believe I am correct in saying there are two more ships which could be transferred, too, under mutual aid; but so far we have not had any country indicating a need for them.

The CHAIRMAN: Carried, gentlemen?

Agreed.

The CHAIRMAN: All right, gentlemen, the army. Military personnel costs, the first item, pay and allowances. That is just about on the nose. Any questions?

Agreed.

The CHAIRMAN: Travelling and removal expenses—this is the army, remember, gentlemen.

Mr. WINCH: I would like to ask on the travelling and removal expenses as regards the armed forces overseas. Is their transportation handled by the department, or is some handled by outside firms?

Mr. PEARKES: That is handled by the department, in that we book passages on commercial shipping lines.

There is a certain number of personnel, an increasing number, that are transferred from Europe to Canada, and vice versa, by R.C.A.F. planes. As more transport planes become available we are transferring a larger proportion by our own air force; but, in the main, these are shipping charges.

Mr. WINCH: That is what I was thinking of. Could you give us any approximation on the use of aircraft, as between the R.C.A.F. and outside private concerns—just approximately?

Mr. PEARKES: There are very few personnel moved by commercial airlines. Practically all the movement is by the R.C.A.F. There are some instances where individuals are moved; and there have been a few cases where it has been considered necessary to charter a plane. However, generally, if they are moved by commercial enterprises, they are moved by ship.

The CHAIRMAN: Shall the item carry, gentlemen?

Agreed.

The CHAIRMAN: Medical and dental consultants and special services.

Mr. FORGIE: Mr. Chairman, I would like to ask the minister if he considers it any part of the department's responsibility to look after the medical care and attention of wives and children of soldiers in different camps throughout the country?

Mr. PEARKES: No, we do not regard it as a responsibility of the army medical services, to look after the dependents in Canada; except that in far-away stations, in northern Canada, we assume that responsibility, where there are no other medical services; and, of course, overseas. However, assistance will be given in case of emergency, of course.

The CHAIRMAN: Do you have in mind Petawawa, more than anything else, Mr. Forgie?

Mr. FORGIE: Yes.

Mr. PEARKES: For that we assume no responsibility.

Mr. FORGIE: The reason I have asked this question is this: As you know, Petawawa is 10 miles from Pembroke.

The CHAIRMAN: Where is Pembroke; where would that be?

Mr. PEARKES: 10 miles from Petawawa.

Mr. FORGIE: It is not far from where you are going fishing, I understand, Mr. Chairman.

The CHAIRMAN: That is right.

Mr. FORGIE: The situation there, as far as hospitalization is concerned, as you know, sir, is it is crowded at the present time, and there is not enough medical attention or enough doctors in that section of the country to take



care of the situation. It is becoming quite acute at the present time, because of the size of Petawawa military camp, and there are approximately 6,500 personnel there at the present time, as I understand it. Those are the figures given to me.

The difficulty in hospitalizing wives and children is becoming very acute, and I was wondering—as, I imagine, the matter is before you, sir—if it is being given any consideration.

Mr. PEARKES: I am informed this particular problem at Petawawa is now under consideration, and the matter is being discussed with the hospital authorities. But, as a general principle, we do not assume responsibility for the dependents.

Mr. FORGIE: Thank you.

The CHAIRMAN: Is that item carried, gentlemen?

Agreed.

The CHAIRMAN: The next item is clothing, personal equipment. There is quite an actual over-expenditure here.

Mr. MACDONALD (*Kings*): On this particular item, there has been an increase of \$6,700,000. It is apparently explained in the notes attached. I wonder if the minister could tell us when this cloth or clothing—I think it is mostly cloth—was purchased, and how old the cloth is that has been taken over by defence production?

Mr. CARTER: That was the Korean war.

Mr. PEARKES: It was purchased, in the main, at the time of the Korean war.

Mr. MACDONALD (*Kings*): It is then about ten years old, I assume.

The CHAIRMAN: Approximately ten years old.

Any further questioning on that item, gentlemen?

Agreed.

The CHAIRMAN: Food supplies. That is just about on the nose, the estimates and expenditures. Any questions?

Agreed.

The CHAIRMAN: Medical and dental supplies. That is a little under-expenditure. Questions?

Agreed.

The CHAIRMAN: Laundry and dry cleaning. Again that is about the estimated expenditure. The estimates are just about even with the expenditure. Questions?

Agreed.

The CHAIRMAN: Now we are going on to all other operating costs. Civil salaries and wages.

Mr. SMITH (*Calgary South*): I wonder, Mr. Chairman, If I might ask the minister—and I am not permitted to ask you by the rules of the committees what the present situation is—but according to the report of the estimates committee of last year:

It takes one civilian to maintain every two men in uniform, your committee urges that there be a constant review of the numbers of personnel on each establishment to prevent any retention of unnecessary staff.

As this is the only year we can deal with,—and not the present—is this year worse than any other year? Have you made an improvement in recent years?



The CHAIRMAN: Mr. Smith, would you like to know if the amount in 1958-59 is over 1957-58?

Mr. SMITH (*Calgary South*): That is what I would like to know, yes.

Mr. PEARKES: The figures I have here are as of March 31, 1958. The continuing employees were 19,233, whereas on March 31 last the continuing employees were 18,543.

Mr. SMITH (*Calgary South*): There was also some discussion and some examination on the relationship of the commission in dealing with classifications and, generally, the cooperation with your department. Were you generally satisfied with the relationship between the commission and yourself, in the work of reclassifying your civilian personnel?

Mr. PEARKES: Yes, we have a close relationship with the commission, and I feel that our relationships are very satisfactory. The type of man that they have supplied has been good. There has been, as you will recall from the remarks I made at the last meeting, a general trend in the reduction of civilian personnel. If you have the evidence before you you will see that there is a general trend. I have not got a copy of the evidence before me.

Mr. SMITH (*Calgary South*): I wonder if I might ask you, Mr. Minister, if you agree with this statement, which was also part of the report, or not:

It is the opinion of the committee that under the present rigidity of the civil service regulations, classification does not permit sufficient flexibility in adjusting the number of civilian employees to the requirements of the department.

I ask this, because this seems to be a little in conflict with what you said a minute ago. Perhaps it is just that you disagree with that section of the report?

Mr. PEARKES: I think there has developed a greater degree of flexibility since 1958-59. On the whole, I feel we have a very loyal and efficient staff of civilian employees.

Mr. LAMBERT: In this connection were those reductions in civilian personnel as a result of the streamlining of establishment, or was this effected in part, or at all, by covering of the positions with service personnel—in other words, a transfer of function, merely as between civilian and service personnel?

Mr. PEARKES: In the main, it is the result of a very careful streamlining which was undertaken in this year and has been continuing since. There may be a few instances where the service personnel took over a civilian's job; but, in the main, it has been due to the streamlining which was undertaken and the doing away with the positions.

Mr. WINCH: On the same point, Mr. Chairman, though indirectly: Could the minister—I hope, briefly—give an explanation as to the policy regarding work being done, or employment being given as between the actual armed services and the civilian personnel?

Because it does not seem to follow a similar pattern in the three services. For example, in the navy, as between the pay and allowances of the service and the civilian personnel. In rough figures it is \$76 million as to \$40 million. When you come to the army it is \$183 million to \$65 million; and, the air force, \$203 million to \$48 million.

Mr. SMITH (*Calgary South*): It is one of the fighting services.

Mr. WINCH: They are all fighting services, Mr. Smith.

Is there any policy decision as to the operation of the armed personnel, the personnel in the armed services, and the occupation or work done by the civilians? Is there any general theme or any general policy at all?

Mr. PEARKES: At that time this was really cleaning up after the Korean operations. When Korea was on there was a natural tendency to release for active operations as many personnel of the armed forces as was possible. To counter that, a number of civilians were engaged to do certain jobs which might quite possibly have been done by ordinary service personnel in the course of their duties—such as kitchen fatigues and those sorts of thing.

Those personnel were relieved. Gradually, we have been tending towards taking over some of that type of work and putting it on to the ordinary servicemen. But the bulk of this employment is in such places as dockyards, where a very large number of civilians are employed. It would not be economic to employ sailors in the dockyards, for instance. In warehousing a number of civilians are employed. In clerical work you have a lot of girls employed.

We try to keep the actual serviceman under training for his particular job. The housekeeping and supply services are being done, as far as possible, by civilians. I think that is the general policy.

Mr. FORGIE: It would be more expensive though, would it not, sir?

Mr. PEARKES: It is more expensive to employ servicemen on those jobs than it is civilians.

Mr. CHAMBERS: In this connection, I might draw to the attention of the committee pages 21 and 22 of the proceedings of the last meeting, where it is pointed out that civilians, since 1956-57, have reduced in number from 54,000 to 49,000. That certainly shows the trend.

The CHAIRMAN: Thank you very much, Mr. Chambers.

Any other questions on this item, gentleman?

Agreed.

The CHAIRMAN: Civilian allowances. Carried?

Any questions?

Agreed.

The CHAIRMAN: Freight, express and cartage. This is an under-estimate.

Agreed.

The CHAIRMAN: Postage.

Agreed.

The CHAIRMAN: Telephones, telegrams and other communication services.

Any questions?

Carried?

Agreed.

The CHAIRMAN: Printing of departmental reports and other publications. That is a little over-expenditure, \$14,000. Any questions?

Agreed.

The CHAIRMAN: Films, displays, broadcasting, advertising, etc. That is an under-expenditure.

Mr. LAMBERT: In this connection, Mr. Chairman, is this the result of concentration, or more of a tri-service effort with respect to recruiting?

Mr. PEARKES: Well, I do not think so. I think the shortage is generally reflected here. It is by not being able to meet the estimate entirely. It is practically up to the estimate, and there were definite cuts made in so far as advertising was concerned.

Mr. CARTER: Are these publicity films or training films included in this item?

Mr. PEARKES: Both.

The CHAIRMAN: Is the item carried?

Agreed.

The CHAIRMAN: Office stationery, supplies, equipment and furnishings. That is a little over-expenditure. Carried?

Agreed.

The CHAIRMAN: Repairs and upkeep of buildings and works, including land. That is an over-expenditure.

Mr. LAMBERT: That is quite a substantial one—of at least 20 per cent. May we have some information as to that?

Mr. PEARKES: This is the same story as in the navy, that a lot of the work was delayed until the winter months, when, in order to take care of the seasonal unemployment, additional work was carried out, in the way of repairs and maintenance.

The CHAIRMAN: Incidentally, gentlemen, we have Colonel Anderson, the director of the army budget with us today, to help us in any of these questions, if we need him.

I also acknowledge the fact we have Rear Admiral R. A. Wright, the naval comptroller, and his assistant, Mr. R. J. Mulligan, here too. They are very welcome, I can assure them; and thank goodness, we did not need them when we had the navy.

Any further questions on repairs and upkeep of buildings and works, including land?

Agreed.

The CHAIRMAN: Rentals of lands, buildings and works. Carried?

Agreed.

The CHAIRMAN: Municipal and public utility services; a little over-expenditure. Carried?

Agreed.

The CHAIRMAN: Pensions, superannuation, benefits for personal services.

Mr. WINCH: This is what I have been harping on for years, and it comes up all the time—"benefits", I mean, a family allowance to those overseas, and why not?

Mr. PEARKES: Family allowances are not paid to personnel who are overseas; that is, the dependents of servicemen who voluntarily have accepted the facilities which are provided to them—by means of transportation and so forth—and have accompanied their husbands overseas. A family allowance is not paid to them because, under the family allowances regulations, the recipients have to be living in Canada.

Mr. WINCH: When that was raised before in the estimates committee we had a similar reply from you, sir. When we raised it under the other department, they admitted it was in the act, but there has never been any request for a change by your department. I completely fail to understand why the families of our armed personnel that are overseas lose this right as a Canadian family. I strenuously object to that, and I would have hoped, by now, you would have made recommendations for a change.

Mr. PEARKES: This matter has been taken up with the other department. It was not paid at this time, and I do not think it is being paid now. Perhaps Mr. Armstrong could give you a breakdown on that.

Mr. ARMSTRONG: Well, as the minister has said, this is governed by the Family Allowances Act. The children of members of the services who are resident outside of Canada are not eligible for family allowance, but there are certain other allowances provided when they are serving abroad. These vary, depending on the location of their service, and in relation to the particular



cost of living; and while this does not specifically offset the non-payment of family allowances, nevertheless in most cases, although not in all, with the additional allowance which is paid overseas the sum received would be larger than here in Canada; but such is not always the case.

Mr. WINCH: You say there is an additional allowance which is paid when the personnel and family are overseas, and that the basis of payment of the additional or special allowance is as the cost is in the area, compared with the city of Ottawa. If that is so, then there is an additional allowance which is based on their costs and on their inconvenience. It is paid for that reason. I made certain of that from information which I was given some two years ago; and on that basis I submit that they are entitled to the same privileges as if they were here in Canada.

The CHAIRMAN: I recall it that you brought this up during the estimates committee and again during the Department of Health and Welfare estimates this year. You have registered your protest. Now, Mr. Fairfield.

Mr. WINCH: I hope I am getting in a further protest, and perhaps making a new or renewed appeal on this matter.

The CHAIRMAN: That is right. Thank you.

Mr. FAIRFIELD: When service families are overseas or abroad do they not receive free medical and dental services and schooling?

Mr. PEARKES: They receive free schooling, and they receive free medical and dental attendances at military hospitals.

Mr. ARMSTRONG: As to medical and dental service there is a hospital plan which is run by the federal government for the people serving overseas. The premium rates are the same as those under the Ontario provincial hospital plan. The dependants are treated in service hospitals, and they receive all the benefits under that plan. It pays the complete bills, both medical and hospital, if they are treated in a service hospital.

Mr. WINCH: You say they pay a premium?

Mr. ARMSTRONG: Yes, the same premium as under the Ontario hospital plan. The same charge is made for both the doctor and the hospitalization. As it now stands, the benefits paid under that hospitalization plan cover the inclusive charge.

Mr. SMITH (*Calgary South*): Did I understand you to say that the net position of an army family living overseas, was that they were better off abroad, financially speaking, than they would be were they living in Canada?

Mr. ARMSTRONG: No, you must have misunderstood me. I said that there were allowances paid overseas to compensate them for their extra costs. In the majority of cases the total income of a man serving abroad would be greater than it is in Canada, notwithstanding the fact that he does not get the family allowance. But that is not so in every case. There are some cases where this does not apply.

Mr. PARIZEAU: Are they not exempt from paying income tax overseas?

Mr. BALDWIN: Mr. Armstrong's answer to Mr. Smith might cover my question; but do I take it from what you said that the additional pay and allowances and other benefits received by the dependents of army personnel overseas would, on the general average, be the equivalent of what would be received from the family allowance in Canada?

Mr. ARMSTRONG: Well, in most cases it would be more than the family allowance, and certainly in the general average, the standard of living that is maintained abroad by servicemen, is certainly equal to that which their people maintain here with the adjusted income.

Mr. BALDWIN: The payment of family allowance overseas would be dependent on the army personnel overseas being in a much better position than



they would be in Canada, if they received family allowance in addition to the various benefits which they would expect to receive?

Mr. ARMSTRONG: That would seem to be the corollary.

Mr. PARIZEAU: Are our forces subject to income tax overseas?

Mr. PEARKES: Oh yes.

Mr. CARTER: Might I ask this question: may we not carry this item and may I have permission, when we come to a similar item under the air force, to produce a table which was presented to the committee on estimates at my request, which gives the exact figures on that particular point?

The CHAIRMAN: That would be very helpful. We can pass this now, and you may produce the table at that time.

Item carried.

Corps of Commissionaires and other services. Are there any questions?

Mr. FORGIE: I would like to ask a question. Are all your commissionaires veterans?

Mr. PEARKES: I think that all the corps of commissionaires are composed of veterans. They are hired by the corps' commissioner and my understanding is that they only hire veterans.

The CHAIRMAN: Carried. Professional fees—architects, engineers, and so on. Any questions?

Mr. WINCH: May I ask if all services in the way of architects and engineers are in your department, or whether there has been any endeavour to bring about greater efficiency by cooperating with the Department of Public Works, with its big staff of engineers and architects?

Mr. PEARKES: These are the fees which have been paid to outside architects.

Mr. WINCH: Oh, they are all outside?

Mr. PEARKES: They are all outside. I understand that the Department of Public Works simply does not have enough personnel to be able to take care of this fluctuation; and it must be a fluctuation so far as architects are concerned. They have some current architects from time to time and we have been able to use their services; but these fees are all for outside professional men.

Mr. LAMBERT: This ties in with No. 1. The department does maintain a certain staff of architects and engineers of its own on the civil side, does it not?

Mr. PEARKES: Yes, that is correct.

The CHAIRMAN: More or less as consultants?

Mr. PEARKES: The outside people are more of the consultant types, while these are more supervisory.

Mr. WINCH: Do we have a basis on which these fees are payable, whether it is 7 per cent, 10 per cent, or 5 per cent, the same as the Department of Public Works?

Mr. LAMBERT: I think there is a treasury board regulation.

The CHAIRMAN: I think there is a standard basis for it.

Mr. ARMSTRONG: We pay the standard rates on which the contracts are arranged by Defence Construction Limited.

The CHAIRMAN: Carried.

Fees for special purposes.

Mr. WEBSTER: If you refer to the first sheet you will see that \$2,300,000 was spent by the navy, and \$300,000 was spent by the army. Why is there that discrepancy? Why is one bigger than the other? Do the navy have more courses, or are they over-trained?

Mr. CHAMBERS: The army does not need them.

Mr. PEARKES: We are more fortunate as far as the army is concerned because when the courses are carried out in the United States by the United States army, tuition fees are waived, whereas the United States navy does charge tuition fees.

The CHAIRMAN: Well. Shall the item carry?

Agreed to.

Fuel for heating, cooking and power generating units. There is an underestimate.

Agreed to.

Gasoline, fuel oil and lubricants?

Agreed to.

Miscellaneous materials and supplies? Are there any questions?

Agreed to.

Barrack, hospital and camp stores. There is a little over expenditure. Are there any questions?

Agreed to.

Repairs and upkeep of equipment; up \$3 million.

Agreed to.

Expenditures not elsewhere provided, miscellaneous items.

Mr. MACDONALD (*Kings*): That is certainly a large item. Could the minister give us briefly some of the larger items obtained under that heading?

The CHAIRMAN: That is under miscellaneous.

Mr. PEARKES: Well, the amount actually expended under this category included claims, and compensations of various natures, \$207,000; survey and mapping, \$1,280,000; grants for training and various physical examinations, \$526,000; for cadets, libraries, and others \$400,000; Canadian troops in Europe, \$78,000; Canadian troops in Indo-China, \$61,777; and various other costs amounting to \$237,000. That is the information that I have.

All these items have been examined and authorized by the treasury board.

Mr. WINCH: Would any of that surveying and mapping have been done outside of Canada, and if so, in what countries?

Mr. PEARKES: I do not think any of that surveying was done outside Canada.

The CHAIRMAN: If it had been, it would have been done at no cost to us. Shall the item carry?

Agreed to.

Now we are under military and other construction, and the first item is purchase of real properties (land and building), where there is quite a substantial over expenditure.

Mr. SMITH (*Calgary South*): There is a report on it, but would you like to elaborate on this item for us?

Mr. PEARKES: That additional cost was caused to meet the demand to purchase 100 housing units from Central Mortgage and Housing Corporation, that amount to \$1,200,000. That was at Oromocto, which is adjacent to Gagetown.

We were at that time trying to make use of the buildings which were at the Gagetown camp, which could not be used because we did not get houses for the married personnel to go into. So it was considered necessary to speed up on the building of married quarters, so that full use could be made of the barrack accommodation.

Mr. SMITH (*Calgary South*): The committee might be interested to know that obviously it was through human nature that an error was made in the estimate or forecast; but how could circumstances like this arise when this plan had been forecast?

Mr. ARMSTRONG: This particular housing project that is referred to here was originally brought about in an arrangement between Central Mortgage and Housing Corporation and the local minister of the province. The housing had to be rented to civilian personnel there. But after it was constructed we found that in fact there was not a market for the particular type of units, a civilian market for the particular type of unit; and since the department still had need for married quarters, it was decided to take them over as married quarters.

This was not foreseen at the time we developed the estimates. It came along during the year.

Mr. SMITH (*Calgary South*): Perhaps we could go further and say it was not foreseen. Is there no better explanation as to how the survey was made? Was it just as simple as that?

Mr. ARMSTRONG: I may have been misunderstood when I explained it first. The project started out, as I said, as a rental project for rental to civilians.

The CHAIRMAN: By a local contractor down there?

Mr. ARMSTRONG: But it turned out that there was not a market for them, so this decision was made to use them as married quarters.

Mr. HELLYER: Did you request Central Mortgage and Housing Corporation to initiate the project in the first place?

Mr. ARMSTRONG: Yes; this was done in cooperation with the department; at least we were concerned about the matter.

Mr. HELLYER: Did you have anything to say about the specifications of the houses built?

Mr. ARMSTRONG: I do not believe we had anything to do with the actual specifications of the houses. The houses were built to minimum standards for low rental housing. They are rows of houses.

Mr. HELLYER: Was there an agreement with Central Mortgage and Housing Corporation to bail them out?

Mr. ARMSTRONG: We had an agreement with Central Mortgage and Housing Corporation to guarantee the rentals if they failed to rent them, and to protect their mortgage interest.

Mr. LAMBERT: What was the directing public agency in the development of what appears to be a purely speculative scheme of housing? Was it the Central Mortgage and Housing Corporation, was it ministerial authority, was it provincial authority, or was it the Department of National Defence?

Mr. ARMSTRONG: As I recollect it, the sponsoring agency was the commission on Oromocto. They were the ones who were interested in having this development take place. Now, as you are aware, that commission is comprised of representatives from the Department of National Defence, the Department of Finance, the federal government, and provincial representatives, as well as local representatives.

The CHAIRMAN: Did you pay the full price for them, or did you happen to get a bargain because you helped some person off the hook?

Mr. ARMSTRONG: We paid the cost price, or the book value of the houses.

Mr. LAMBERT: The federal government's participation in it would be subject to approval of the treasury board at the time, would it not?

Mr. ARMSTRONG: Yes, for the original construction. The original agreement was subject to the approval of the treasury board; and as to the actual



development itself, I believe it also was referred to the treasury board by Central Mortgage and Housing Corporation, but I would not be too certain about it. If you would like me to get a specific answer, I would have to look it up.

Mr. LAMBERT: Are there any other types of similar contingent agreements involving the Department of National Defence on any other basis?

The CHAIRMAN: Do you mean at the present, or during this year?

Mr. ARMSTRONG: Not that I am aware of.

Mr. LAMBERT: Well during 1958-59?

Mr. ARMSTRONG: No, I am not aware of any.

Mr. SMITH (*Calgary South*): This is the one in which there is a difference between the actual expenditures and the estimates.

The CHAIRMAN: Yes, it is \$1,200,000.

Mr. WINCH: May I ask if there is included in the expenditures for the year under review anything for the construction of a new armoury at Vancouver?

Mr. PEARKES: No.

The CHAIRMAN: If there are no further questions, the item is carried. Agreed to.

Construction—major contract projects, and under estimate of \$2 million. Are there any questions?

Agreed to.

Construction—day labour and minor contract projects. There is a little underestimate. Are there any questions?

Agreed to.

Now we are on major procurement and production costs. Tanks and A.F.V.'s. There is an underestimate. Are there any questions?

Agreed to.

Mechanical equipment including transport. There is an underexpenditure.

Mr. LAMBERT: What was the motive behind it? Was this merely for the purchase of military transport, or was it a decision to eliminate the purchase of certain types completely?

Mr. PEARKES: It was a decision to eliminate certain types of equipment or certain types of vehicles such as panel trucks, and station wagons. That is what caused the under expenditure.

Mr. WINCH: Was there another change of policy in regard to the purchase of tanks, or were any tanks purchased?

Mr. PEARKES: There were no tanks purchased. There has been no new tank—or there were no new tanks available at that time for purchase in any NATO country.

Mr. HELLYER: Does this item include anything for Bobcat development?

Mr. PEARKES: Yes.

Mr. HELLYER: Was that program reported in any way?

Mr. PEARKES: Yes. Oh, that is not correct. There was an item carried under development later for the Bobcat.

Mr. BALDWIN: That is what is referred to on page 9 of the notes where he says that the expenditure figures were less than those estimated as a result of a reduction following detailed review?



Mr. PEARKES: That is right; there was a review made of the requirements. Requests had been made by the various commands, and a number of these vehicles were eliminated as not being considered essential.

The CHAIRMAN: Thank you very much. Are there any further questions? If not, the item will carry?

Agreed to.

Armament equipment, an under expenditure of \$1½ million. Any questions.

Agreed to.

Signal and wireless equipment. There is quite a saving here. Any questions?

Mr. MACDONALD (*Kings*): Under this item I presume that the increase in the estimates is due to the increased necessity for additional wireless equipment for the national survival program. Has there been any difficulty in obtaining wireless and other equipment such as that?

The CHAIRMAN: During the 1958-59 year?

Mr. MACDONALD (*Kings*): Yes.

Mr. PEARKES: There was no survival equipment provided for in this year's estimates. The under expenditure was due to the inability of the development to keep pace with the requirements.

The CHAIRMAN: Are there any further questions?

Agreed to.

Special training equipment. There is an under expenditure. Any questions?

Agreed to.

Miscellaneous technical equipment.

Mr. SMITH (*Calgary South*): Does the same answer apply here as to the previous question?

Mr. PEARKES: Yes, it was due to the short fall of the program.

Mr. SMITH (*Calgary South*): And the material could not be purchased?

The CHAIRMAN: Are there any further questions?

Mr. CARTER: Your estimate on this item was far in excess, or more than double the actual expenditure in 1957-58. Do you envisage an increase in this item?

Mr. PEARKES: We were hoping to get the equipment which would help to identify fallout and radioactivity, but it simply was not procurable at that time. We had hoped that the development would have been quicker, and that it would have been available.

The CHAIRMAN: Are there any further questions?

Agreed to.

Ammunition and bombs.

Mr. WINCH: I would like to ask two questions. Can the minister tell us of these \$25,184,000 what amount of it was for ammunition and bombs purchased and manufactured in Canada, and is there included under this terminology anything in the nature of chemical or bacteriological supplies?

Mr. PEARKES: I am afraid I will have to get this for you. Practically all of this was manufactured in Canada. I think I can give you the types of ammunition; there was the 105 Howitzer ammunition for the 105 millimeter Howitzer; there was ammunition for the 7.62 rifle—that is the new rifle; there was 20 pound ammunition and there was ammunition for the 60 millimeter mortar; there was ammunition for the 90 millimeter anti-aircraft gun. There

is an amount of some \$2,692,000 for various miscellaneous items. Under those miscellaneous items there might be, and probably were, some special types of ammunition which were bought outside the country; but the majority of them were produced in this country. Your other question was in respect of ammunition for chemical warfare.

Mr. WINCH: Or bacteriological warfare.

Mr. PEARKES: Chemical or bacteriological warfare. There was none for bacteriological warfare purposes. All the work done on bacteriological warfare is by way of a defensive and experimental nature.

Mr. WINCH: We can ask about this under another section.

Mr. PEARKES: Yes, the defence research board.

Mr. WINCH: In respect of the supplying of ammunition and bombs to the Canadian troops overseas, is that all Canadian? I mean, do you draw from other sources overseas or is Canada completely responsible for the purchase of its own ammunition and bombs overseas?

Mr. PEARKES: In the main it is from Canadian sources; but at this time there were some weapons which were of other allied countries and the ammunition for those weapons would be supplied from United States or British sources.

Mr. WINCH: May I ask what proportion that bears to the usual type of ammunition?

Mr. PEARKES: I could only give an opinion. It would be a fraction of the main amount.

Mr. SMITH (*Calgary South*): Might I ask in respect of the bombs in particular—because the ammunition is available only from certain sources centralized basically in eastern Canada—whether there was any attempt made to distribute the purchase of these bombs through any other area in Canada? We were told there should be greater account taken of encouraging industry to provide these materials for you.

Mr. PEARKES: I could not answer that question for you because the contracts would all be placed by defence production.

Mr. HELLYER: Would the minister tell us whether or not the 90mm anti-aircraft ammunition will be used and what its function will be.

Mr. PEARKES: At that time it was part of the equipment of the force—in 1958-59. I should think it was used then for practice purposes and would have been available if required for the anti-aircraft guns at that time.

Mr. HELLYER: In effect are you saying that this is no longer a requirement and that these guns are being phased out of service?

Mr. PEARKES: I believe these guns and ammunition now have been given under mutual aid.

The CHAIRMAN: Are there any further questions? Carried.

Are there any questions on mutual aid? Carried. That pretty well cleans up army, gentlemen. We are making wonderful progress. Thank you.

Mr. CHAMBERS: It now being 10 minutes until the meeting of the house, would it be in order to adjourn now?

Agreed.

Mr. PEARKES: We have made such excellent progress that it looks as though we will be going on soon to the estimates. I have prepared some material what I thought might be of some assistance to committee members. It is not a white paper, but is just a progress report of how development has gone along and what items we have procured. In fact this shows what

progress has been made in the way of procurement of the equipment. I would suggest that this be issued now, if the Chairman sees fit.

The CHAIRMAN: Certainly.

Mr. SMITH (*Calgary South*): May I suggest that prior to the next meeting the steering committee meet to discuss some of our problems.

The CHAIRMAN: Yes; that was my intention.

—The committee adjourned.—





ORDER OF REFERENCE

MONDAY, May 16, 1960.

*Ordered*,—That the name of Mr. Thompson be substituted for that of Mr. Pratt on the Special Committee on Defence Expenditures.

*Attest*

L.-J. RAYMOND,  
*Clerk of the House.*



## MINUTES OF PROCEEDINGS

The Senate, Room 256-S.

TUESDAY, May 17, 1960.

(4)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Lambert, Roberge, Smith (*Calgary South*), Thompson, Webster, Winch—13.

*In attendance:* Honourable George R. Pearkes, Minister of National Defence; Mr. F. R. Miller, Deputy Minister; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns, and Air Commodore R. W. Desbarats, Chief of Finance, Royal Canadian Air Force.

The Chairman submitted the Report of the Subcommittee on Agenda and Procedure as follows:

The Subcommittee on Agenda and Procedure met on Monday, May 16, at 4.00 o'clock p.m.

*Present:* Messrs. Halpenny (*Chairman*); Hellyer, Fairfield, Smith (*Calgary South*) and Winch.

The Subcommittee discussed procedure and agreed on the following recommendations:

1. In the event that the Committee decide to call witnesses other than officials of the Department that such witnesses be heard following the examination of the Minister and the Departmental officials on Item 1 of the Estimates of the Department of National Defence 1960-61.
2. That no regular member of the Armed Forces be called to testify before the Committee on policy matters.

Respectfully submitted,

G. E. Halpenny,

*Chairman.*

On motion of Mr. Baldwin, seconded by Mr. Fairfield, the said report as modified was adopted.

The Committee resumed from Friday, May 13th, consideration of the Expenditures of the Department of National Defence for the fiscal years 1958-59.

The Minister, Mr. Miller and Mr. Armstrong were questioned.

The department officials filed an answer to a question of Mr. Winch, which appears as *Appendix "A"* to the printed report of proceedings of this day.

During his examination the Minister undertook to supply at a later date answers to questions by Messrs. Baldwin, Hellyer, Winch and Smith (*Calgary South*).

And consideration of the Expenditures 1958-59 of the Department of National Defence still continuing, it was adjourned until the next sitting.

At 11 o'clock a.m., on motion of Mr. Smith (*Calgary South*), the Committee adjourned to meet again at 9.30 o'clock a.m. tomorrow.

Antoine Chassé,  
*Clerk of the Committee.*



## EVIDENCE

TUESDAY, May 17, 1960.  
9.30 a.m.

The CHAIRMAN: We have a quorum, gentlemen. There are three things I would like to mention.

First of all, I would like to welcome Mr. Ben Thompson, and I know you will all join me in welcoming him. He is replacing Mr. Pratt.

Secondly, the reason for this meeting today was that our minister had a commitment for tomorrow; but he has decided that he can be here tomorrow, without any trouble, so we will not only have this extra meeting today, but the one tomorrow, as per schedule, and again on Friday.

The third thing: your steering committee met yesterday afternoon, and this is the report which I will read to you.

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The subcommittee discussed procedure and agreed on the following recommendations:

1. In the event that the committee decide to call witnesses other than officials of the department, that such witnesses be heard following the examination of the minister and the departmental officials on Item 1 of the estimates of the Department of National Defence, 1960-61.

2. That no member of the armed forces be called to testify before the committee on policy matters.

This is your committee's recommendation. Can it be adopted, gentlemen?

Mr. LAMBERT: Mr. Chairman, if outside witnesses are called who severely criticise the present departmental policy, or criticise individual service policy, how do you anticipate dealing with the matter? Are they present service chiefs, or others, who are not to have an opportunity to rebut the allegations which may be purely statements thrown to the wind and which people may be prepared to run away from?

The CHAIRMAN: You will recall the first meeting of the steering committee—

Mr. LAMBERT: I agree there is a problem there, but what I am concerned about is the headline grabbers.

Mr. WINCH: Mr. Chairman, you will remember that was not the intent of the subcommittee at all.

The intent of the recommendation is that it has always been customary procedure that anything that has to do with questioning on policy is the responsibility of, and answers should be obtained from the minister himself, unless he desires to have it answered by a departmental head.

The only purpose of this recommendation, as I understood it, was that this committee would not call on anyone in the armed personnel for the direct purpose of interrogating them on policy, as that comes under the minister.

Mr. SMITH (*Calgary South*): I would suggest, Mr. Chairman, we are debating the calling of witnesses rather prematurely, because, let it be pointed out, the recommendation says:

"In the event that the committee decide to call witnesses—"

It seems to me, until such time as the committee have recommended to the steering committee any such things, we are very premature in assuming they are to be called. Until the names have been submitted, I suggest we are putting the cart ahead of the horse.

On item 2:

That no member of the armed forces be called to testify before the committee on policy matters—

I had a little to do with the drafting of this particular section. Perhaps it should read:

No member of the active armed forces should be called.

This would not necessarily preclude a militia officer.

The CHAIRMAN: Mr. Winch pointed out the intent of item No. 2—

That no member of the armed forces be called to testify before the committee on policy matters.

The whole point there is that we, the members of the subcommittee, hope that the members of the committee will agree to this, but that does not stop Mr. Pearkes from calling any person he so desires to call.

Mr. LAMBERT: Okay, if the explanation is given—or if any explanation is given.

The CHAIRMAN: Is this agreeable then, gentlemen?

Mr. BALDWIN: Is that with the amendment as suggested by Mr. Smith?

Mr. SMITH (*Calgary South*): I purely suggested an active member of the armed forces. On the subcommittee we were not necessarily referring to militia officers; and a member of the militia is still a member of the armed forces.

The CHAIRMAN: This would be the amendment:

That no active member of the armed forces be called to testify.

Mr. SMITH (*Calgary South*): That is right.

Mr. BALDWIN: I move that.

The CHAIRMAN: Seconder?

Mr. FAIRFIELD: I second that.

Motion agreed to.

Mr. SMITH (*Calgary South*): It has been pointed out to me—and it is only a matter of words—that the word “regular” might be better than the word “active”.

The CHAIRMAN: Is that agreeable, that it should be changed from the word “active” to the word “regular”?

Mr. HELLYER: What does “regular” mean?

Mr. BALDWIN: I wonder if you could read that again, Mr. Chairman?

The CHAIRMAN: It would read thus:

That no active—or regular—member of the armed forces be called to testify before the committee on policy matters.

Mr. SMITH (*Calgary South*): That is differentiating between a permanent air force, army or naval officer and the militia.

The CHAIRMAN: “Active” is the better word.

Mr. SMITH (*Calgary South*): Yes, I think so.

The CHAIRMAN: What do you say, Mr. Minister; which is better?

The Hon. GEORGE R. PEARKES (*Minister of National Defence*): The army is known as the regular army, and the navy and air force are known under the same term.

The CHAIRMAN: “Regular” would be the better word.

Agreed.

Mr. HELLYER: This does not preclude retired officers?

The CHAIRMAN: No. Before we get on to the R.C.A.F., Mr. Smith asked a question regarding the 1958-59 expenditures on the R.C.N. that has to do with the maintenance cost of piston-engined trainer aircraft. Those figures are as follows: The Harvard, \$113,400; the Expeditor, \$135,360.

Gentlemen, we are on the R.C.A.F., comparing the actual expenditures to the 1958-59 estimates. Under military personnel costs, the first item is pay and allowances. There is an expenditure of \$203,544,000, as against an estimate of \$198,260,000.

Mr. CARTER: On that point, Mr. Chairman, at the last meeting Mr. Winch raised the question of payment of family allowances to overseas personnel. At that point I think I asked that this item be stood until we could locate a table which had been put on *Hansard* in reply to a question which I asked on May 13.

The CHAIRMAN: That is right, Mr. Carter. I recall that.

Mr. CARTER: The answer is on page 3638 of *Hansard* of 1959. I do not think it is necessary to put the question but the reply to the question indicates that a leading aircraftsman, with five children, in a tour of duty of three years would lose, in family allowances, \$1,584, with an off-setting saving in income tax of \$16.80.

A leading aircraftsman, with three children, loses \$912 in family allowances, and would receive a saving, an offsetting as a result of income tax, of \$278.88.

If I remember correctly, when we were considering pay and allowances—when we were considering the estimates of which we are now considering the expenditures, I think the minister said there was an intention—I am not sure whether he put it as more than an intention at the time, but there was an intention to extend the tour of duty, so as to save the cost of moving personnel, the travelling cost of transferring personnel. I would like the minister to confirm that if it is correct.

Mr. PEARKES: At this period—that is, 1958-59—the normal tour of duty was for two years. Now we have extended that, and the normal tour of duty is for three years, with the privilege of applying for an extension, if the individual so desires. That applies to all of the services.

Mr. CARTER: The reason I wanted that confirmed is because if the tour of duty is extended that will increase still more the discrepancy, or the loss in allowances; because if a person goes overseas with two children—he conceivably could have five children before the tour of duty is over.

Mr. PEARKES: The rate of increase is quite rapid and I have no information as to the number of twins which are born.

Mr. CARTER: Well, that is with the extension.

Mr. PEARKES: But extensions are not forced upon any man, at all. It is purely if they apply for it; and I must say a great many men do apply for it, particularly married men. It is the single man who is perhaps a little more homesick than the married man who has his family over there.

Mr. CARTER: I think the point that could be developed from this is if the Family Allowances Act will not permit payments to overseas personnel, can it be remedied in some other way under the Department of National Defence? Can it amend some of its acts to offset this loss in income?

Mr. PEARKES: We have to obtain approval for any special allowances for personnel who are in Europe, who do not obtain the family allowances.

Mr. CARTER: I might say on that point, Mr. Chairman, that the loss is greater to the lower ranks. For an officer, for example, a wing commander, his saving in income tax is \$998.04, against a loss of \$1,584.



The CHAIRMAN: What is your question, Mr. Carter?

Mr. CARTER: The question is, can something be done to eliminate the discrepancy in this loss between a lower rank and a higher rank, because the loss in income falls most heavily on the lower rank.

The CHAIRMAN: I think the minister has already answered you on that point. Do you wish to add anything to it, Mr. Minister?

Mr. PEARKES: No, we have not found any medium by which this can be adjusted at the present time. We are aware of the problem, and to a certain extent it is compensated for by the allowances and facilities we provide, as was described at the last meeting.

The CHAIRMAN: The fact they ask for extensions on many occasions would indicate they seem to be fairly happy, anyway.

Mr. CHAMBERS: I think the figures Mr. Carter has quoted perhaps do not give the full story there, because surely things like school taxes and so on represent a saving to the married man. Schooling is provided, as the minister pointed out at our last meeting, and there are various other amenities. It is rather hard to get them into a form for comparison against family allowances, but there are other benefits that the man serving overseas gets that do go some distance in making up for this loss.

The CHAIRMAN: Do you have a question, Mr. Chambers?

Mr. CHAMBERS: No, I have a statement, and I have made it.

Mr. FAIRFIELD: Is there any way we could get from the department a comparative figure on personnel in Canada who have to pay out of their family allowances for schooling, as compared to the people overseas who do not have to pay that; and what their official relation is?

The question Mr. Carter has brought up is this, that this is an injustice to the personnel serving overseas. But, to offset that, surely they are getting benefits. Is there any way the department could make a cash item out of it?

Mr. PEARKES: There is on overseas allowance for a leading aircraftsman of \$432 a year.

Mr. FAIRFIELD: That answers part of his complaint and question.

Mr. PEARKES: I am sorry, that is the total for four years. I beg your pardon.

Mr. CARTER: If that is so, Mr. Chairman, in this table which I quoted from page 3638, I asked for the total of additional allowances payable in England which are not received by a serviceman of similar rank in married quarters in Canada, and which are peculiar to married personnel as distinct from single personnel. In that column it is "nil".

The CHAIRMAN: Could I bring it to a head, Mr. Minister, and ask if there have been any changes since that has been tabled in *Hansard*? The date of that is what, Mr. Carter?

Mr. CARTER: May 13, 1959.

Mr. PEARKES: There have been no changes made. Perhaps Mr. Armstrong could give you a little more information on that.

Mr. WINCH: There was no allowance made in England, but they are on the continent.

Mr. ARMSTRONG (Assistant Deputy Minister, Finance Division, Department of National Defence): The overseas allowance the minister referred to is allowed to both married and single people. It does not therefore reflect in that column. As Mr. Winch has pointed out, this table refers to the married man in married quarters in England, and that particular man does not receive any extra allowance. He does receive, of course, a house that is completely furnished, heated and lighted for him, in addition to other amenities.



Mr. CARTER: A man in Canada receives the same thing?

Mr. ARMSTRONG: The comparative cost of living, according to statistics we have obtained from the dominion bureau of statistics, is somewhat lower; and this is the reason he does not receive an extra allowance.

I think, in all of the cases of overseas service, there is an extra allowance of some amount. This varies, depending on the country and location where people are.

Mr. SMITH (*Calgary South*): My colleague to the right of me points out there are no shortages of applications for people asking to go overseas.

Mr. PEARKES: The duty of going overseas is not by application.

Mr. SMITH (*Calgary South*): But it is nevertheless highly sought after?

Mr. PEARKES: It is highly sought after.

Mr. BALDWIN: In answer to a question I asked Mr. Armstrong on Friday last he said, in his opinion, in most cases the additional pay and allowances and other benefits received by the dependents of army personnel overseas would, on the general average, be the equivalent of what would be received from the family allowance in Canada, and more than the family allowance.

Possibly, at the same time, we might obtain a table showing the comparative benefits, either in money or moneys worth, received by the same ranks in Canada and overseas, to make a comparison.

The CHAIRMAN: Is that possible?

Mr. PEARKES: We could produce that by next week. I do not know that we can get it tomorrow.

The CHAIRMAN: That is perfectly all right.

Gentlemen, item 1 is carried?

Agreed.

The CHAIRMAN: Item 2, travelling and removal expenses, a little under-expenditure. Any questions?

Agreed.

The CHAIRMAN: Item 3, medical and dental consultants and special services. There is a little under-expenditure there. Any questions?

Agreed.

The CHAIRMAN: Item 4, clothing, personal equipment. There is quite an increase over the estimate. Any questions?

Mr. LAMBERT: Explained.

The CHAIRMAN: Could you explain, Mr. Minister?

Mr. LAMBERT: No, it has been explained.

Mr. PEARKES: That is the R.C.A.F. share of that matter. I wonder if the committee wants further information on this cloth and clothing. I have had a memorandum prepared, which I could place on the record if you so wish?

Mr. SMITH (*Calgary South*): I think it would be useful.

The CHAIRMAN: Could we take it as read, gentlemen?

Agreed.

#### *Cloth Holdings for Military Clothing Purposes*

1. By minute 546276 treasury board authorized the transfer to the Department of National Defence of a stock of cloth valued at \$15,072,000 which had been purchased and held by the Department of Defence Production for military purposes, and which the latter department had been holding in rented warehouse storage. Space having become available in military depots, it was no longer necessary to use rented space for the purpose.

2. The stock held by the Department of Defence Production had its origin in the very real difficulties experienced in obtaining cloth to outfit the military forces following their expansion as a result of the Korean War. In the light of the international situation then existing, it was considered prudent to acquire a stock of essential woven fabrics, in the event that further supplies should need to be issued urgently.

3. The acquisition of this cloth and its ready availability in an unmanufactured condition, also had the useful advantage of reducing the number of finished garments which would otherwise have had to be held at a higher investment cost.

4. While originally provided against possible emergency needs the stock was also used, with administrative advantage, to meet the annual normal maintenance needs of the three services, for which purposes fabrics were withdrawn and replaced from time to time as necessary. This provided a means of "turning over" the stock, and eased the problem of providing cloth to the manufacturers of finished garments. Over the years, the stock has been reduced from a peak in 1953 of 34,216,882 yards to the present 14,916,518 yards.

5. On 26 February 1960 the transfer of the stock was completed from the Department of Defence Production's warehouse to the naval supply depot in Montreal, where it is now housed.

6. The stock received by the Department of National Defence totalled approximately 14,916,518 yards of many different items of fabric. Of this quantity:

- (a) 189 fabric items totalling approximately 11,161,219 yards are expected to be used in the normal maintenance of the clothing of the military services over the next five years.
- (b) 180 fabric items totalling approximately 3,755,299 yards are being closely examined to determine whether they can be used economically within the next five years (during which further period they could probably be held without deterioration). It is possible that some, or all, of this quantity may need to be disposed of.

7. The naval supply depot custodians of the stock report that with one exception the stock is in good condition. The exception is in respect of about one-quarter of the stock which was baled with iron strapping. The strapping has marked the outside layer of the bale but the markings can be removed by sponging. A slight indentation or crease has been created by the strap which may present some difficulties to manufacturers when cutting. This damage is stated in round figures to affect about  $\frac{1}{4}$  of 1 per cent of the baled stock.

8. The items of fabric held in the stock are not all uniform clothing items, but include woven fabrics for parkas, sleeping bags, hospital clothing, shirtings, ponchos, raincoats, kit bags, tenting, mattress covers, etc.

9. There have been stories in the press to the effect that the stock of approximately 15 million yards of fabric would provide 3 million uniforms. This is incorrect. Not only, as stated above, does a considerable proportion of the stock consist of fabrics used for other than uniform purposes, but the fabrics used for major uniform purposes are held only in such quantities as could provide, for example, approximately—

Ordinary uniform .....	230,600
Greatcoats .....	51,880
Summer uniform tropical .....	165,634
Bush uniform .....	101,000
Raincoats .....	136,619

The CHAIRMAN: Food supplies, a little under-expenditure.

Mr. CARTER: On that point, on food supplies, I notice in the air force that when you compare the actual expenditures for 1958-59 with the expenditures for 57-58 that the two figures are much closer together than in the case of the army and navy. I think the expenditures on the army were \$500 more than the previous year, and in the navy it was about \$800 or \$900 more. Are you trying to thin down the air force or fatten up the navy?

Mr. PEARKES: You will recall about this time the air force brought in a series of exercises, which may have had that effect!

The CHAIRMAN: That could be. Is that carried, gentlemen?

Mr. THOMPSON: Mr. Chairman, where do we obtain the food supplies for our armed forces overseas?

The CHAIRMAN: Do you mean, where did we during 1958-59?

Mr. THOMPSON: Yes.

Mr. PEARKES: You are asking for the army?

Mr. THOMPSON: Well, any of the armed forces—say the air force?

Mr. PEARKES: The air force obtained them through the American supply channel, and they purchased outright from American sources supplies which were required.

Mr. THOMPSON: The reason I asked the question, Mr. Chairman, is because I represent an agricultural riding, and they produce some of the finest cheddar cheese in the world and apparently if any member of our armed forces wanted some cheddar cheese it would have to be sent over to him by relatives, because none of it was purchased for the armed forces through the armed services. Would it not be possible to have some cheddar cheese purchased for the armed forces?

Mr. PEARKES: When the troops were first sent under the NATO agreement to Europe, it was considered quite impractical to start up a Canadian supply system for such a limited number of troops. So arrangements were made that the air force would be supplied through United States channels and supply lines, and that the army would be supplied through United Kingdom supply lines, because they were at that time part of the United Kingdom division.

Mr. SMITH (*Calgary South*): You testified two years ago that you could acquire these food products at a considerable saving to the rest of the Canadian taxpayers who did not produce cheddar cheese.

The CHAIRMAN: Does the item carry?

Mr. HELLYER: Do they get any Russian salmon?

Mr. PEARKES: They do not get any Russian salmon now. I believe at one time there was a certain quantity of Russian canned salmon which was supplied in the British ration. However I understand it is not being supplied at the present time.

The CHAIRMAN: Are there any further questions? May the item carry?

Item agreed to.

Medical and dental supplies. Any questions?

Item agreed to.

Laundry and dry cleaning? Any questions?

Item agreed to.

Item 2, all other operating costs; civil salaries and wages. Any questions?

Mr. SMITH (*Calgary South*): May I ask the minister whether or not any experiment was carried out in any one of the three services to determine the effectiveness of the policy of utilizing combined members of the military



personnel and civilian personnel? I think you said that quite obviously the cost on the basis of employing civilian personnel under certain circumstances did provide a considerable saving to your department. You also indicated to us that you had reduced the number of personnel in this year and in subsequent years materially. Is there any experimental work done to confirm this figure, or otherwise to determine the effectiveness of the use of military personnel in the air force as compared to the army, or vice versa with the navy or air force?

Mr. PEARKES: All I can say is that the ratio as between civilian and military personnel is constantly under review. I know of no particular experiment which was carried out.

Mr. SMITH (*Calgary South*): The ratio stands at two to one. Is it so for all services?

Mr. PEARKES: I could not say what the ratio is at the present time.

Mr. SMITH (*Calgary South*): That was so in this year. That is fine.

The CHAIRMAN: Are there any further questions? If not, the item is carried.

Item agreed to.

Civilian allowances. A little over expenditure. Any questions?

Item agreed to.

Freight, express and cartage. A little under expenditure. Any questions?

Item agreed to.

Mr. LAMBERT: Under that item of freight, express and cartage in so far as road transport is concerned did the air force maintain its own fleet of transports, or is that work done through civilian contractors?

Mr. PEARKES: It is practically all done through civilian contracts. There is no fleet of transports in the air force.

The CHAIRMAN: Are there any further questions?

Mr. PEARKES: That is ground transport.

Mr. LAMBERT: This is road transport.

Mr. PEARKES: Yes.

The CHAIRMAN: Does the item carry?

Item agreed to.

Postage; an under expenditure. Are there any questions?

Item agreed to.

Telephones, telegrams and other communication services; a little under. Are there any questions?

Item agreed to.

Printing of departmental and other publications.

Mr. HELLYER: Yesterday, through you, Mr. Chairman, I asked for a list of all R.C.A.F. publications for the year under consideration, including all service manuals, and so on. I wondered if that list is available?

The CHAIRMAN: I do not know whether it is available today.

Mr. PEARKES: We do not have it today, but it will be provided.

Mr. HELLYER: May we agree that this item will stand, then?

The CHAIRMAN: Yes. Let it stand, if you wish; printing of departmental reports and other publications.

Item agreed to.

Films, displays, broadcasting, advertising, and so on. Just about on the nose. Are there any questions?

Item agreed to.



Mr. CARTER: Are there separate purchasing agencies for each of the services for films and that sort of thing? Does each service spend its own budget on them, or is there a central procurement agency?

Mr. PEARKES: As far as advertising for recruiting, or as far as advertising is concerned, there is a central committee, and the amount of money is allocated for several headings; there is a certain amount of money allocated to each service for its own particular type of recruiting, and there is a certain amount of money for tri-service recruiting. There is a central committee in which all the services are represented, which controls and apportions the advertising allotments.

The CHAIRMAN: Does each service have its own public relations department?

Mr. PEARKES: Each service has its own public relations department with a director of public relations who coordinates the whole.

The CHAIRMAN: Thank you.

Mr. SMITH (*Calgary South*): You had not unified any of the recruiting services at this point?

Mr. PEARKES: Not at this stage.

The CHAIRMAN: Are there any further questions?

Item agreed to.

Office stationery, supplies, equipment and furnishings. An under expenditure. Are there any questions?

Item agreed to.

Repairs and upkeep of buildings, works, including land. An under expenditure. Any questions?

Mr. HELLYER: Are there any existing agreements between the department and other departments of government, for instance, the Department of Transport, in respect to the care and maintenance of D.N.D. property?

Mr. PEARKES: Well, the care and maintenance of property is carried out in two ways: one, by day to day repair carried out under the supervision of service personnel, and those contracts which would be let through the Department of Defence Production. Any other agreement we have for obtaining land, and renting land, is usually made through the Department of Transport acting as our agent. Is that the sort of thing you want?

Mr. HELLYER: Are there any cases where you are leasing land or loaning land to the Department of Transport, such as secondary landing facilities?

Mr. PEARKES: I think there might be, but I could not say offhand, because there is land which is from time to time transferred to different departments such as Northern Affairs, Indian Affairs, and so on. So there may be cases in which some of these departments are renting, let us say, for the nominal sum of \$1 or something like that, some of our property. But it would be a minor matter.

Mr. LAMBERT: Now that the P.M.Q. is on army and airforce bases approaching in some cases eight or ten years, how are they standing up? In the maintenance of these individual houses, or semidetached, or even of the small row housing which is in general use in the P.M.Q.'s, are they standing up relatively well, or are you finding that the maintenance of them is getting progressively higher?

Mr. PEARKES: I can only generalize in that respect, and I would say, generally speaking, that the permanent married quarters are standing up fairly well. However there are cases where temporary buildings have been converted into married quarters, and these are certainly showing the wear that they have been subjected to.

Mr. SMITH (*Calgary South*): With respect to those buildings which do not come under this item, may I ask why it is the architecture is such that they insist, in many areas, in putting the backs of these houses fronting on the street, much to the distress of the occupants. This is a fact in the case of the most recent construction in major military centres, where they have reversed these houses so that they are backing on the street.

The CHAIRMAN: There must be an answer to that some place.

Mr. FORGIE: Perhaps they do it because it gives them a better view.

Mr. SMITH (*Calgary South*): There has been severe criticism about it from residents and people in the surrounding area.

Mr. PEARKES: All I can say is that it would probably be the design which was approved by—what shall we call them—the town planners; all these designs would be approved by the Department of Defence Construction—no, it would be Central Mortgage and Housing Corporation.

Mr. SMITH (*Calgary South*): Might I ask, through the chairman, if the minister would be kind enough to inquire about it, because it is the cause of some concern.

Mr. PEARKES: Absolutely.

The CHAIRMAN: Now we come to the item for repairs and upkeep of buildings and works including land. Are there any further questions?

Item agreed to.

Now we have municipal and public utility services. Are there any questions?

Item agreed to.

Now we have pensions, superannuation, benefits for personal services. A little under expenditure. Any questions?

Item agreed to.

Corps of commissionaires and other services. Any questions?

Item agreed to.

Mr. Thompson, I do not know if you realize it, but we have pretty well gone through a lot of these items both under the army and the navy. That is why there are so few questions being asked.

Professional fees, architects, engineers, and so on. Any questions? A little over expenditure.

Mr. BALDWIN: Is there a very simple explanation or reason behind the decrease in the high expenditure of over \$16 million in 1956-57 down to the expenditure in the year under survey of \$1½ million?

Mr. PEARKES: Yes, that was during the period in 1957 when there was far more construction work going on than in the period under review. The work of preparing plans for some of the camps was then being taken up, and I am informed that the biggest item in this 1956-57 period was the planning for the mid-Canada line which was then under construction, as well as the planning for certain buildings and camps. I think that Sarcee was one of the camps at that time.

The CHAIRMAN: Are there any further questions?

Mr. BALDWIN: No.

The CHAIRMAN: Item agreed to.

Fees for special courses.

Mr. WINCH: Might I use this expenditure for the purpose of asking one question?

The CHAIRMAN: Go ahead.

Mr. WINCH: My question has to do with training. We know from an answer given in the house, and from other information which the minister has given us, that the cost of training a pilot was around \$32,000 in 1940, but at the present time it has increased to a cost of \$80,000, for training a pilot. That is naturally a very heavy investment of the taxpayer in the training. So I would like to ask if the minister could give us any information as to how many, upon the termination of their enlistment period, leave the services after all this money has been expended on their training?

Mr. PEARKES: Yes, we would have to get you that information. I do not think we would have it here.

The CHAIRMAN: Would it be agreeable if they got it for you, Mr. Winch?

Mr. WINCH: Yes.

The CHAIRMAN: Very well. (See Appendix "A")

Item agreed to.

Mid-Canada line, maintenance by contract; an expenditure of \$19,108,000, with an estimate of \$22 million.

Mr. HELLYER: In view of recent public criticism of this Mid-Canada line, does the minister have any brief statement or comment he would like to make about its usefulness or effectiveness?

Mr. PEARKES: I would say this: that the establishment of the mid-Canada line which I think was started somewhere about 1955 or 1956, was a major endeavour on an entirely new operation, and that the idea of the mid-Canada line was originated through what was known as the McGill fence at one time, and it was located in what was then and still is in many places inaccessible country. I think every care was exercised in the construction of that line, from what I can ascertain. It was started and pretty well completed before I took over this department. But I have made some inquiries about it, and I would say that the unprecedented difficulties, the unknown difficulties brought about the heavy cost.

Mr. HELLYER: It was not so much the unprecedented difficulties, but whether or not the line has a functional utility at the present time.

Mr. PEARKES: It certainly had a functional utility in 1958-59, which is the time we are discussing.

Mr. WINCH: Might we have a little more detailed information on the functional use of the line at that time? And is it possible to have any comment on the comment made by Group Captain Limbrick who, I understand, was a former director of radio warfare, R.C.A.F., in which he stated that it has no functional use, did not have a functional use, and is completely seconded and obsolete.

Mr. CHAMBERS: Mr. Chairman, on a point of order, would we not be able to have a more thorough discussion of this when the estimates in this area are before us?

The CHAIRMAN: I was going to suggest to Mr. Winch, that when we come to 1960-61, that would be the time, because this is pretty well ancient history now. The use of the line then might be a little different from what it is now. So if it is agreeable to you, I suggest that we hold it.

Mr. WINCH: Except that we are discussing the expenditures of that particular year.

The CHAIRMAN: I am sure the minister will answer you now if you wish it.

Mr. PEARKES: In the year we are considering the main threat to this continent was the possibility of attack by Russian bombers. It was essential that early warning be provided, and that the route being followed by those bombers be tracked.



The early warning would be given by the Dew line which is along the Arctic, which I am sure you know, and then those bombers would have been lost from the radar which was available at that time, until they again crossed the mid-Canada line which was some hundreds of miles south of the Dew line. The bombers would then be picked up again, and you would then be able to track the route which they were following.

The mid-Canada line is a comparatively short distance in advance of the Pinetree line which is the control line for intercepting aircraft which would have been dispatched in order to intercept the bombers.

Mr. WINCH: Might I ask one question on this: is it correct or incorrect that at this time which is under review, in this phase of the public accounts, that it was possible and highly probable that a plane coming over with an aggressive purpose in mind had equipment that could jam and ruin any kind of warning system?

Mr. PEARKES: I would say that that was not correct. We tested the warning systems. They were frequently tested. There have been tests carried out to see how effective the counter-electronic measures might be, and I would say that while it might be possible in some isolated cases to have stopped the information which was coming through, that could not have been done on a continental-wide basis. My own opinion is that the mid-Canada line in this year was an essential requirement for warning and tracking hostile aircraft so as to enable interceptors to engage them.

Mr. SMITH (*Calgary South*): I wonder if I might ask through the chair if what Mr. Winch referred to as the source of his question, Group Captain Limbrick, who was director of radio warfare—if you are aware, sir, that during his period in office he made any similar representations to those which he has put in print for publication?

Mr. PEARKES: Mr. Limbrick was not in the R.C.A.F. during the period in which I have been minister. I would therefore not be able to say.

Mr. WINCH: I know that Mr. Smith has not had a chance to read this, but Mr. Limbrick has said that in his various positions he did go so far as to invite court martial if the authorities thought that he was wrong.

The CHAIRMAN: May we not leave it until the 1960-61 figures?

Mr. SMITH (*Calgary South*): Can the minister state whether or not in the period under consideration Mr. Limbrick made any representations? Apparently he did so prior to that.

Mr. PEARKES: I do not think that Mr. Limbrick has ever made any definite recommendations to me.

Mr. SMITH (*Calgary South*): He held a responsible position, and he seemed to have certain views which he considered more recently.

Mr. WINCH: Mr. Limbrick said: "Because of this I took my objections about the mid-Canada to my superiors", and so on.

The CHAIRMAN: That was not during the minister's tenure of office.

Mr. PEARKES: I would think that he put his objections up to his superiors, and that his superiors considered them, and that they had found that they were not acceptable.

Mr. SMITH (*Calgary South*): That is fine. He made representations, but not during your period.

The CHAIRMAN: Shall the item carry?

Item agreed to.

Fuel for heating, cooking and power generating units. Are there any questions?

Item agreed to.



Gasoline, fuel oil, and lubricants? Any questions?

Item agreed to.

Miscellaneous materials and supplies? Any questions?

Item agreed to.

Barrack, hospital and camp stores? Any questions?

Item agreed to.

Repairs and upkeep of equipment. Any questions?

Item agreed to.

Now we come to miscellaneous expenditures.

Mr. HELLYER: In the previous item what would be the major components there?

Mr. PEARKES: A reason for the reduction was the very active campaign being carried on at that time in order to reduce flying accidents, and therefore the number of repairs were not as high as had been anticipated.

The CHAIRMAN: Does that answer your question, or do you want to know the main items?

Mr. HELLYER: I think the minister has answered my question in part, in the important inference at least that there was a reduction of upkeep of major equipment, aircraft, fire fighting machines, and so on.

Mr. PEARKES: That is right.

The CHAIRMAN: Expenditures not elsewhere provided. Are there any questions.

Item agreed to.

The CHAIRMAN: We are leaving the printing of the departmental reports stand, on item II.

We go to item III, military and other construction. Purchase of real properties (land and buildings). The expenditure is much less than the estimate. Questions?

Mr. SMITH (*Calgary South*): I wonder if we might ask, through the Chair, if the reason for this had anything to do with the fact that during this period there was a reduction in our NATO participation? Does this show a reduction at all? We closed up a number of stations.

Mr. PEARKES: It certainly would not be connected with any of our NATO commitments overseas.

Mr. SMITH (*Calgary South*): I meant, in Canada?

Mr. PEARKES: As far as the NATO training in Canada is concerned, that NATO training was just beginning to phase out. It might have been that there was property it would have been desirable to acquire, but it was decided not to acquire it.

Mr. SMITH (*Calgary South*): Is there any explanation, other than NATO, then?

Mr. PEARKES: In this division, the property that was not acquired in the year amounted to some \$510,000.

Mr. HELLYER: The explanation with respect to NATO training seems a bit unlikely, in view of the fact that the proposed termination of this program had been under discussion for some time. Was not there any other anticipated requirement that was wiped out?

The CHAIRMAN: Actually there is an under-expenditure of just over \$1 million.

Mr. PEARKES: This amount of money was put into the estimate. I do not know whether there is any information as to detailed items. The general story is that the land was not needed and, therefore, was not acquired during this year.

The CHAIRMAN: Possibly the reason is this. If you look back into your 1956-57 and 1957-58 your budget or estimate for 1958-59 is somewhat comparable to those three years before.

Mr. HELLYER: Specifically, my question would seek to determine what function, if any, was eliminated resulting in this requirement no longer being valid.

Mr. ARMSTRONG: If I could answer a little here. I do not have with me a list of specific properties, but there were two major areas. There were certain under-expenditures in addition to the ones the minister mentioned. Certain land that had been expropriated at Primrose lake was one instance. We had made provision for the settlement of the cost, and it was not, in fact, settled in that year, and that resulted in an under-expenditure of \$400,000. There was one other land settlement we had provided for in 1958-59, of approximately \$100,000. That, in fact, was settled in 1957-58. That again resulted in an under-expenditure. So there was approximately \$500,000 on those two items.

In addition to that, certain other property provided for was not actually acquired in that year.

The CHAIRMAN: Plus your NATO. That makes up quite a bit of it, Mr. Hellyer. Is that satisfactory to you?

Mr. HELLYER: That is fine.

The CHAIRMAN: Item carried?

Agreed.

The CHAIRMAN: Construction—major contract projects.

Mr. LAMBERT: Is this reduction in expenditure the result of the deferment or the result of complete cancellation of projects?

Mr. PEARKES: It would apply to both. There was some deferment, and others were cancelled. I can give you some of the major items.

At Hoberg, a radio station in British Columbia—which was a very inaccessible place to get at, because it was on top of a mountain—it just was not possible to complete or do the work necessary then. There was a big under-payment in connection with the administrative buildings, such as classrooms for the schools, and the whole plan at that particular station was being revised at this time. The station has been reorganized since then, and the payments—in part, anyway—have been made since this date.

Another big item was at Camp Borden, where there was additional accommodation planned.

Another one was at North Bay, where runway levelling, airdrome clearance, amounting to \$1½ million, had to be deferred.

Then, in the case of Trenton, there was deferment and there were changes made there because at this time we were considering the transfer of training command from Trenton to Winnipeg, and the move of the air transport command from Montreal to Trenton. There were necessary changes there.

Mr. WINCH: Mr. Chairman, I certainly have no objection when we can get a saving on the spending of money; and this is a big one. But the point I would like to ask about is this: When you reach a decision you feel you are going to require \$35 million, that must involve a great deal of work and planning—and of decision, as you asked for the estimate. And yet in a 12-month period you do not require \$36 million, but \$19,286,000, which means there must have been a radical change.

Does that not demonstrate some degree of lack of proper planning and a big degree of inefficiency? I mean, the fact that in a 12-month period that situation could come about?

Mr. PEARKES: I do not think that is a fair criticism, Mr. Winch. The estimates have to be prepared a very long time in advance. Now, in fact, estimates for next year are in the course of preparation by the department. By the end of 1961 I am quite certain that there will be many changes. I know of no other department of government, or any activity, where you are having such frequent changes owing to the invention of new weapons and changes of the threat, changes in the general concept of operations, that it is almost impossible to make accurate estimates.

This time it was a period of change. It still is a period of very great changes which makes accurate estimating extremely difficult.

We are constantly looking to see whether expenditures can be reduced, and so we are able to save money by not spending all that has been allocated to us. As these cover a great many different projects, so you find that there may be general saving all across the line; or it is not possible to procure the materials which are necessary for construction work.

Mr. WINCH: I certainly have no objection to not spending money just because you have got it, but it seems to me something is obviously wrong here.

The CHAIRMAN: Mr. Winch, it is unlike business in a way, because your budgeting in this case—as the minister just explained—starts a good 18 months before the year begins. As you know business budgets usually go in—the calendar and fiscal year are about the same—about October 1, instead of a year ahead; and I imagine that there are these changes, as the minister explained.

Mr. PEARKES: And there has been, could I say, a clamping down at this time on expenditures.

The CHAIRMAN: And Mr. Winch agrees to that.

Mr. WINCH: I certainly do, but the tough spot is it did not start early enough.

The CHAIRMAN: May the item carry, gentlemen, or are there any further questions?

Agreed.

The CHAIRMAN: Construction—day labour and minor contract projects. That is a little under-expenditure. Any questions?

Agreed.

The CHAIRMAN: We now go to section IV, to major procurement and production costs.

Mr. HELLYER: I wonder if we could have a breakdown of the major components of each of these several items?

The CHAIRMAN: Item No. 1 is aircraft and engines.

Mr. HELLYER: Yes.

Mr. PEARKES: This is the detail of expenditures. These are the actual expenditures. On the Arrow, \$90,477,000; on the CF-100, \$19,538,000; on the Argus aircraft, \$51,188,000; on the CC.106, \$29,209,000; on the Sabre, \$1,642,000; on the T.33's, \$2,837,000; and various other aircraft expenditures, \$11 million.

Mr. SMITH (*Calgary South*): Could I ask through the Chair, Mr. Minister, this: I assume maintenance also comes under this estimate?

The CHAIRMAN: No.

Mr. PEARKES: No.



Mr. SMITH (*Calgary South*): At some time may I revert, and ask if you would be kind enough to give me the cost of the maintenance of piston engined aircraft, at a future meeting?

The CHAIRMAN: Certainly.

Mr. Hellyer, you had a further question on this item?

Mr. HELLYER: Were there any major revisions in the expenditure, by item, on these six items?

Mr. PEARKES: The major reduction here was in connection with the Arrow. During this year the decision was first of all made not to proceed with the fire control system, the Sparrow; and then, later, at the end of the year, it was decided not to proceed with the production of the Arrow, and the order was cancelled. That is where you get the major under-expenditures in this case.

Mr. WINCH: Could we ask there, Mr. Chairman, how far your fire control system and how far, on the Arrow, had you reached towards the completion of the project, as far as the utility value of both was concerned?

Mr. SMITH (*Calgary South*): Could we have the project defined too? Is this with respect to the 37 pre-production models—

Mr. WINCH: I am speaking on the first point raised here, when the minister spoke of the fire control system. How far had it gone towards completion, and what contracts were there; and could I ask for some understanding as to just what was the main reason why Canada had gone ahead with this specific fire control system?

Mr. PEARKES: To answer the first question first, the amounts of money which had been spent on tooling and production of the Astra fire control in 1957-58, or up to 1957-58, were \$3,908,750, plus another expenditure of \$55,116. In 1958 there was a further expenditure, under the first item, of \$339,471; and, under the second item, of \$2,054,225. Those were some of the early development costs of the fire control.

Mr. WINCH: How close to completion were you on that development project when it was cancelled?

Mr. PEARKES: It was in the early stages of development. We had not gone into production in this respect at all.

Mr. WINCH: Was this development wholly and solely for the purpose of utilization on the Arrow?

Mr. PEARKES: The Sparrow development had started in the United States Navy, and the U.S. Navy, at one time, cancelled the Sparrow, after we had considered that the Sparrow would be the best weapon for the CF-105. Now, when the United States cancelled their development program with the Sparrow, Canada had to assume the whole cost of its further development.

Mr. WINCH: That is the very point we are coming to now, which I did not quite know how to ask at first. That is this: In view of the fact that the United States, for their own reasons, had decided to cancel the Sparrow, am I right in assuming they must have reached that decision because they did not feel it had a utility value, or that there was something coming along that would be better than the Sparrow? If so, then, why, on the cancellation by the United States of that work on the Sparrow, did we go ahead and assume the entire cost, which runs into a considerable sum of money; and did we learn from the reasons of the United States cancellation that they had something better that was coming up?—and I assume they must have. Why did we go ahead in Canada and follow through?

The CHAIRMAN: On further development, do you mean?

Mr. WINCH: Yes.



Mr. PEARKES: I think Mr. Miller can give you further details on that Sparrow development.

Mr. F. R. MILLER (*Deputy Minister of National Defence*): The Sparrow we decided on was the mark II, I think it was. Anyway, there was a family of Sparrows under development. The navy carried the basic development well forward, almost to the operational stage; and then they shifted to a lower level version of the Sparrow. They had a good high altitude weapon, but they wanted a lower altitude weapon, because of the particular U.S. Navy requirements.

The Sparrow we were interested in had been developed very close to being completed. With the budgetary process which it went through in the United States, they tried to get it in. Then the money squeeze came on and they had to abandon the mark we were interested in, at a fairly late stage in its development. We thought we could go ahead and complete it.

Mr. WINCH: Could you tell me whether there was available from the same sources any piece of equipment, that is fire control equipment, that would do the high altitude job without us, in Canada, proceeding to develop it?

The CHAIRMAN: We did not go into production at any time.

Mr. WINCH: I was speaking of development.

Mr. PEARKES: No.

Mr. WINCH: You say, in the United States it was dropped because this particular branch of the family of Sparrows was low altitude, and you wanted high altitude. Was there anything else available in the high altitudes sphere, as far as the United States was concerned?

Mr. MILLER: Yes, there were other possible weapon systems there. The Sparrow was in the continuing development stage even then.

Mr. WINCH: And the production stage?

Mr. PEARKES: No.

Mr. WINCH: Were they not in the production stage of anything at all—in the way of the high altitude instrument or weapon that you required?

Mr. MILLER: Yes, I think probably they were, but it was not a very satisfactory weapon. The weapon was still under continuing development. The Falcon was the furthest developed at that time. It had some major drawbacks at that time, and it required further development.

Mr. WINCH: I have not quite got it clear, and I would like to pursue it a moment, if I may. I still have not got it clear in my mind, on this particular item, and I am not going into any others at the moment. That will come later. I am still not clear as to why, when the United States, with all their resources, have the Sparrow at a point of near completion on development, and drop it, that Canada then takes it up and decides to proceed with it. Then, of course, they eventually drop it themselves. I cannot understand those following stages.

The CHAIRMAN: As I understand it, Canada was developing it along with the U.S. Navy. Is that not correct—or a different type of Sparrow?

Mr. PEARKES: On the timing of the decision, I think that Canada decided on it quite a bit before the American navy dropped it. When the decision had been made their program was going forward at that time in the United States. It had not been dropped when Canada decided to use that weapon.

Mr. WINCH: Could I ask the minister—because this is strictly policy and I must direct it to the minister—if it is a general policy in the Defence Department that when they are working in cooperation with the United States on development matters and decide to adopt—which I understand you say Canada decided to do, even in the development period in the States—Canada decided

to adopt the Sparrow is it the general policy of your department to reach a decision and go through development and into production? This is the only instance we have of this kind of situation. Is it the general policy to operate that way? We have other things, and I might as well mention the Bomarc for one. You get the decision being made in Canada to adopt it, when it is in the development stage in the United States, and we do not know if it is going to work or not. If the United States decides to stop development and production, then Canada decides to go ahead with it.

The CHAIRMAN: Would it answer your question to keep it straight on the line.

Mr. WINCH: If it is part of the general policy.

The CHAIRMAN: Please, Mr. Winch. If the minister could tell us how many months longer we developed after the United States Navy stopped development, would that answer your question?

Mr. WINCH: In part.

Mr. PEARKES: I would have to look that up. I would say, approximately, development had gone on for about a year. It may have been longer than that, from the time the U.S. Navy discontinued going ahead with the development of the Sparrow II,—was it?—and Canada continued on. I could get the actual dates.

Mr. WINCH: Your reason for discontinuance of the Sparrow was not because it was completely out in the United States, but because you decided to wipe out the Arrow.

Mr. PEARKES: I wonder if a brief statement by me on this Arrow program might be helpful at this time? It would outline the reasons?

The CHAIRMAN: I think it would be very helpful.

Mr. PEARKES: I would not make it long.

Mr. SMITH (*Calgary South*): I think it would be excellent, Mr. Minister. May I ask if, in so doing, you would trace the history of the aircraft, not only from the standpoint of the period of time from your appointment, but from the time of the initial concept of the aircraft—its intended use at that time, the period of time to the pre-production models, to the point it was intended to re-equip our own squadrons?

Mr. PEARKES: I did prepare something yesterday which I think I can read out. It is in as concise a form as I could make it, and it is absolutely factual.

During the Korean war the introduction of the MIG-17 fighter revealed that the Soviet Union was well advanced in jet production, and there were indications that the Russians had the capability of producing turbo-jet bombers. It was therefore considered at that time that by 1958 the Soviets might have the capability of attacking North America with turbo-jet bombers carrying atomic bombs. This appreciation generated a requirement for a supersonic jet fighter to replace the CF-100 after 1958.

Canada was, at this time, primarily responsible for the air defence of Canada. The only arrangement for United States support dealt with reinforcing after the battle had begun. The concept of air defence for Canada during this period called for nine regular squadrons and ten auxiliary squadrons, with a total requirement of from five to six hundred aircraft. The development of anti-aircraft missiles was still in its infancy.

By early 1954 the Soviet Union had produced a long-range jet bomber and the thermo-nuclear bomb. Thus, the bomber threat against this continent had become a reality and, consequently, closer cooperation with the United States became a necessity. The construction of the three warning and control lines was proceeded with with urgency.

The early concept for the replacement of the CF-100, which subsequently became known as the CF-105, or the Avro Arrow, was for an aircraft with a radius of 300 nautical miles, a combat ceiling of 60,000 feet, and a maximum speed at high altitude of Mach 2. The CF-105 project was therefore started in May, 1953, when treasury board approved the design study allocating \$200,000 for the project. This amount was later increased to \$500,000, in the same year.

In December 1953 the development program for two prototype airframes was approved by cabinet defence committee for an amount of \$26,900,000, which was to be spread over a period of five years.

Early estimates as to cost were from \$1½ to \$2 million per plane. By 1955 it became evident that it would be impractical to arm the auxiliary squadrons with this aircraft. So with the phrasing out of the auxiliary squadrons from the fighter role, the requirements for the CF-105 dropped to about 150 aircraft.

All efforts to interest either the United States or the United Kingdom in this aircraft failed, although when this aircraft was first conceived neither the United States nor the United Kingdom had in their planning any comparable aircraft.

By 1955 the Century class of aircraft in the United States was being developed. Therefore as a result of the limited number and the increasing cost—estimates as to the cost had for a number of reasons increased enormously—from 1955 on the program was subject to constant review, and frequent warnings were given that, should conditions change, or other developments occur, the project might be cancelled.

In March, 1955, a development project covering 40 pre-production aircraft, and a new engine was approved in the amount of \$280 million.

In September of 1955 this amount was revised upwards to \$340 million. In December, 1955, the program was revised again, restricting that program to eleven aircraft, and expenditures to March 31, 1958 were to be held to \$170 million.

A series of re-appraisals took place but development continued. Meanwhile great developments were being made with the intercontinental ballistic missiles.

Mr. Krushchev had declared that land bombers were obsolete. During the same period there was no further evidence to show that the Soviet Union was in fact developing supersonic bombers or increasing the inventory of their long-range bomber forces.

The advent of Sputnik in 1957 confirmed the assumption that the U.S.S.R. had made considerable progress in the production of missiles. It became evident that in the near future the main threat to North America would come from the ICBM. The performance of Sputnik and the firing of other tests gave great impetus to the U.S.A. missile and ground to air rocket programs. These developments, both by the Soviet Union and the United States had a profound effect on the solution of our air defence problem.

In September of 1958 the Prime Minister announced a cost-sharing program by which the United States would pay two-thirds of the costs for further improvements to the Pinetree line, for the introduction of SAGE, and for the establishing of two Bomarc squadrons. The cost of the two Bomarc stations was to be about \$20 million. Canada's share of the whole project was to be about \$120 million. That was about one-third of the whole project.

In February of 1959 the CF-105 was finally cancelled. At that time the estimated total costs of the Arrow program for a pre-production order of 37 aircraft and a production order of 169 aircraft, including fire control and weapons system, amounted to approximately, \$2,289,000,000. That estimated sum apart from expenditures to date was to be, over the years, more or



less as follows: for 1959-60 \$390 million; for 1960-61, \$454 million; for 1961-62, \$378 million; for 1962-63, \$337 million; and subsequently another \$259 million.

A possible alternative program in which there would be only 60 production aircraft was estimated to cost \$1,489,000,000. Apart from expenditures to date that was to be divided over the years as follows: 1959-60, \$378 million; 1960-61, \$344 million; 1961-62, \$178 million; 1962-63, \$97 million; and in subsequent years \$21 million.

Thus from very small beginnings it will be seen that the program had grown from the start, in the development of an airframe only, to one where the development of an aircraft engine had been undertaken, and also the development and production of a very expensive fire control and weapons system.

Certainly the final estimates of the costs that were received were never contemplated in the early consideration that was given to this project. In fact the costs had risen from an early estimate of \$1½ million to \$2 million per plan, to \$12.5 million, that is, \$12,500,000 per plane, if it had included the original fire control system; or \$7,800,000, if the alternative or modified fire control system had been introduced.

Now I might say that at no time did the Arrow go beyond the development stage; and never was any order for the production of any aircraft given.

Now, I think that is a brief summary of the history of the Arrow. I have tried to get it condensed, and I have tried to give you the reasons why these changes occurred. All I can say, in conclusion, is that the cost of \$12½ million for an aircraft, or even, if the alternative system of fire control had been introduced, of \$7,800,000 was just a price tag which was too high to be included in the defence budgets of those days.

The CHAIRMAN: Thank you very much.

Mr. SMITH (*Calgary South*): Mr. Chairman, before we adjourn might I suggest that since we are obviously not going to be able to obtain the evidence prior to our meeting tomorrow, and since the minister's statement of history is important, would it be possible for the department to give us copies of that statement before tomorrow's meeting?

The CHAIRMAN: I think that could be arranged, could it not?

Mr. PEARKES: Yes, I think so.

Mr. HELLYER: I would appreciate having it, because the cost of this plane seems to have grown, even after the cancellation.

—The committee adjourned.



## APPENDIX "A"

By Mr. Winch, M.P.

*Questions:*

1. How many trained air crew officers, including those in command or staff appointments, requested retirement from the Royal Canadian Air Force (a) in the fiscal year 1958-59; (b) in 1959-60?
2. What was the approximate cost of training these officers?
3. How many technically-trained enlisted personnel declined to re-enlist (a) in 1958-59; (b) in 1959-60?
4. How many made other arrangements for discharge from the service?

*Answers:*

1. The answer to Part 1 is: (a) 11; (b) 10.
2. The answer to Part 2 is: (a) \$816,000; (b) \$736,000.
3. The answer to Part 3 is: (a) 584; (b) 662.
4. The answer to Part 4 is: in 1958-59, 41; in 1959-60, 59.

(Hansard #76, 11-5-60, page 3771.)



## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

WEDNESDAY, May 18, 1960.

(5)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Lambert, Parizeau, Roberge, Smith (*Calgary South*), Thompson, Winch—13.

*In attendance:* Honourable George R. Pearkes, Minister of National Defence; Mr. F. R. Miller, Deputy Minister; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Mr. D. B. Dwyer, Superintendent of Parliamentary Returns, and Air Commodore Desbarats, Chief of Finance, Royal Canadian Air Force.

Before proceeding with the Orders of the Day, the Committee was informed by the chairman that an extract of the evidence given by the Honourable George R. Pearkes on the previous day relating to the Arrow plane had been prepared in mimeographed form and distributed to all members of the committee shortly after the closing of the meeting on Tuesday.

The Committee resumed from Tuesday, May 17th, consideration of the Expenditures of the Department of National Defence for the fiscal year 1958-59.

The following returns were filed by the Departmental officials and ordered to be appended to the printed record of today's proceedings:

1. Requested by Mr. Carter—Financial position of married accompanied personnel of 1 Air Division (RCAF) and Canadian Infantry Brigade during overseas tours of four years.—*Appendix "A"*.
2. Requested by Mr. Hellyer—Publications printed for the RCAF in 1958-59.—*Appendix "B"*.
3. Requested by Mr. Smith (*Calgary South*)—Cost of maintaining Piston-Driven Training Aircraft—1958-59.—*Appendix "C"*.
4. Requested by Mr. Winch—Cost of Training RCAF Pilot to Wings Standard, 1940, 1950 and 1960 Progressive Increase in Costs.—*Appendix "D"*.

The Minister, and Messrs. Miller and Armstrong were questioned.

And the consideration of the Expenditures of the Department of National Defence for the fiscal year 1958-59 still continuing, it was adjourned until the next sitting.

At 11.00 o'clock a.m. the Committee adjourned to meet again at 9.30 o'clock a.m. Friday, May 20th, 1960.

Antoine Chassé,  
*Clerk of the Committee.*





## EVIDENCE

WEDNESDAY, May 18, 1960.

9:30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

To comply with the committee's request, with the cooperation of the committee reporters branch and the office of the Minister of National Defence, it was possible to prepare mimeographed copies of the minister's statement on the Arrow which he gave to the committee yesterday, and a copy of that statement was placed in each member's mail box shortly after 5:00 o'clock yesterday afternoon.

It is an exact copy of the text which will appear in the printed report of proceedings No. 3, which should reach members some time today. Incidentally, we got very good cooperation from the Queen's printer on that.

However, three slight corrections should be made on the mimeographed copy. On page 2 at the end of line six, the word "with" should be inserted; and on page four, the first line, in the second paragraph, the last two words should read "manned bombers"—Mr. Khrushchev had declared that manned bombers were obsolete . . . ; and on page four, at the end of the first line of the third paragraph the word "the" should be inserted.

The department has prepared answers for Mr. Forgie and Mr. Winch, who asked questions on overseas allowances. Perhaps it was Mr. Carter, but it does not matter anyway, because they are here. If it is agreeable we will table these and have them included in the evidence.

(See Appendix "A".)

Mr. Hellyer wished a list of publications including training manuals for 1958 and 1959. Is it agreeable to have this tabled?

Agreed.

(See Appendix "B".)

Mr. HELLYER: Yes, I would like to have this.

The CHAIRMAN: All right, Mr. Hellyer.

And then Mr. Smith wished the cost of maintenance of piston driven training aircraft in 1958 and 1959. Would you like that for yourself, Mr. Smith?

Mr. SMITH (*Calgary South*): I would like just to look at it and then have it tabled.

(See appendix "C".)

The CHAIRMAN: Mr. Winch asked for the cost of training R.C.A.F. pilots to wing standard, 1940, 1950, and 1960—that is, for the progressive increase in costs.

Mr. WINCH: That is right, and it was filed in the house.

(See appendix "D".)

The CHAIRMAN: Now, Mr. Minister, you made your statement yesterday. Have you any supplementary statement to make now?

Mr. CARTER: Before we begin, may I ask if there will be an opportunity at one of the sittings either on the expenditures or on the estimates to discuss this table on family allowances? We will not see it until we get the evidence.

The CHAIRMAN: Yes, by all means.

Mr. CARTER: There will be an opportunity?

The CHAIRMAN: Yes. Have you any supplementary statement to make Mr. Minister?

Hon. G. R. PEARKES (*Minister of National Defence*): No, I have no supplementary statement. A question was asked at the end of the meeting regarding these actual figures, and it was suggested by Mr. Hellyer that these figures did not conform with previously published figures. But they are the same as were given by the Prime Minister on February 20, 1959, and which are to be found in *Hansard* at page 1222. They read as follows:

It is estimated that with these changes the total average cost per unit for 100 operational aircraft could be reduced from the figure of about \$12,500,000 each—

And that was the figure which I quoted.

—to about \$7,800,000 each, including weapons, spare parts and the completion of development, but not including any of the sum of \$303 million spent on development prior to September last.

I did not give in this paper the figure of \$303 million. I said in addition to the cost already spent; so these figures I have given here do conform exactly, with that one exception of the increase of \$303 million.

The CHAIRMAN: Thank you.

Mr. LAMBERT: In this cost of the Arrow program, did this include any modifications to the existing fighter defence airfields in this country, which would follow upon the introduction of the Arrow in an operational role?

Mr. PEARKES: No, Mr. Chairman. No ground environment expenses are included in these figures which I gave. They are figures for the construction of the aircraft, the engine, the fire control system, the weapons, and the spare parts.

Mr. LAMBERT: Was any estimate ever made as to what the possible costs might be?

Mr. PEARKES: I am informed that the estimate was \$34 million.

Mr. SMITH (*Calgary South*): What would that be, specifically?

Mr. PEARKES: That was for the lengthening of the runways, the lighting, and buildings for the storage for the weapons.

Mr. SMITH (*Calgary South*): This \$34 million is surely only for a very limited number of runways, based on runway construction cost today?

Mr. PEARKES: It was intended to have the aircraft at stations which are already established where there are squadrons; that would be at North Bay, Uplands, Bagotville, St. Hubert, and Comox.

Mr. CHAMBERS: There was a series of questions yesterday from Mr. Winch asking why, when the United States navy cancelled the Sparrow program, Canada did not follow suit. Is it not true that with aircraft of this sort, had we at that time changed the weapon system to be used with it, it would have involved extensive re-design of the aircraft with resulting expenses?

Mr. PEARKES: If you change the weapon system in an aircraft it is almost inevitable that there have to be substantial changes made in the aircraft itself, not necessarily to the frame of it, but in rearrangement of the wiring, the electronic system, and everything connected with it.

Mr. CHAMBERS: And this would be extensive, would it not, to pursue?

Mr. PEARKES: It would certainly cost money. I do not think we have any estimate as to the change, except that by introducing this Falcon system, which would be a cheaper system, the amounts are given as \$7.8 million, as opposed to \$12.5 million per aircraft.

Mr. WINCH: On that same question I understood the minister to say yesterday that the Sparrow had not yet been completed through the development stage; therefore its efficiency or effectiveness had not yet been proven. So from what has been said just now are we to take it that it has been the policy to proceed with very heavy expenditures on a program, and on the planning of an aircraft without knowing whether or not the fire control system is going to work?

Mr. PEARKES: The fire control system, and the planning for the fire control system, and the planning for the aircraft proceed at a parallel and simultaneous time, because you have to fit one into the other. I do not think you could wait for the planning of the fire control system and delay the start of the planning for the aircraft. They go along together, and they were proceeding together at the time. But they had not been joined up at any time, and my understanding is that they had not been joined together at the time that it was cancelled.

Mr. SMITH (*Calgary South*): Mr. Minister, is it fair to say that the Arrow program was cancelled because of the combination of two factors, one of which was the economic factor, and the other was because of the limitation of the purposes of the aircraft?

Mr. PEARKES: Plus the decreasing bomber threat; those were the three main factors. And perhaps I should add to that the limited number of aircraft which could be produced, because we were unable to get the United States or the United Kingdom or other countries to commit themselves to purchase these aircraft.

Mr. SMITH (*Calgary South*): In addition to that, at page three of your comments you make reference to the attempt to interest the United States or the United Kingdom. You say:

All efforts to interest either the United States or the United Kingdom in this aircraft failed—

I wonder if you could perhaps pinpoint the time when these efforts were actually made?

Mr. PEARKES: Well, these efforts were made over a long period. At one time my predecessor went down to Washington and he endeavoured to have the United States interested in this aircraft. I followed that course, and I made more than one visit to Washington to see the then secretary of defence, Mr. McElroy, and Mr. Gates, and the senior air force people there.

I was in the United Kingdom and I spoke to the United Kingdom people, and my visits were followed and preceded by a large number of officials. The company also was trying on its own to get the United States interested, I believe.

Mr. SMITH (*Calgary South*): Could you tell us—although these are somewhat out of date objections now—the objections at the time of your own representations by the United States?

Mr. PEARKES: I would say there were two main factors. The United States were then producing an aircraft which they considered comparable to the CF-105; and the second thing was that the cost of the CF-105 was more than they were prepared to pay.

Mr. SMITH (*Calgary South*): It is difficult to ask you, sir, any question in relation to the period when you did not serve as minister, but perhaps your staff might help you on this. Can you give us anything more than just your comments that representations were made prior to your appointment?

Can we in any way qualify this as to the type of representations, or the type of reply that was made in advance of your own appointment? Is there anything on record that indicates what representations were made—anything by either the department or the company?



Mr. PEARKES: I have a memo here which is referring to November, 1955, and it says:

Ministers deferred consideration of a proposal to proceed with the CF-105 development program pending inquiries to be made by the Minister of National Defence of the United States, secretary of war, as to the possibility of United States sharing in or taking over the whole program.

This was a government decision which was reached on Thursday, November 17.

Mr. HELLYER: In what year?

Mr. PEARKES: 1955. I was informed:

The Minister of National Defence proceeded to Washington and had discussions with the U.S. secretary of air. While no record is available of these discussions, it is understood that the United States secretary of air expressed some concern as to the possibility of the Canadian government not proceeding with this aircraft, as they did not expect anything to appear in the U.S. development field to take the place of CF-105 to meet requirements in Canada. However, it is believed that no commitment was received from the United States secretary of air that the United States would purchase any of these aircraft for their own use.

Mr. SMITH (*Calgary South*): Could you tell me what you are reading from, please, Mr. Pearkes.

Mr. PEARKES: I was reading out what was a cabinet conclusion then about deferring consideration.

Mr. SMITH (*Calgary South*): Could you repeat that, sir; I am sorry?

Mr. PEARKES: I said that was a government decision taken at that time. I do not know whether I should have quoted actually word for word the government decision of that time.

Mr. HELLYER: Under the circumstances, you would have no objection to reading cabinet conclusions on the same subject since?

The CHAIRMAN: I think the whole thing is more or less out of order, reading from a decision of the previous government.

Mr. SMITH (*Calgary South*): The reason I have asked—I did not, frankly, know what I was going to get; but I am endeavouring to ascertain something, and perhaps I could place this question with the minister: We do know, and we have had references made several times in the most recent document, that representations of a type were made prior to your appointment, sir; and you mentioned 1955 as one example. What I am attempting to find out is: what was the attitude of the secretary of war, or the secretary of state, or the United States government to these representatives? Did they, at that time, provide any definite encouragement that they intended to purchase, or that they intended to in any way take part in the development of this aircraft?

Mr. PEARKES: I am quite certain that at no time did the United States make any firm commitment that they were going to purchase this aircraft. They expressed interest in it; they said they liked it. But never at any time was any firm commitment given.

Mr. SMITH (*Calgary South*): Is it equally true, sir, that this would apply to any other country, such as the United Kingdom or France?

Mr. PEARKES: That applies to the United Kingdom and France, and any other country. I am certain that at no time was there any firm commitment that they would—in fact, I think I can go further than that: never at any time did they give an indication that they would purchase any of these aircraft. They expressed interest in it; they said they thought it was a good aircraft.



But never at any time was there a commitment to purchase, and no United States money, to my knowledge, was ever placed in the development of this aircraft. It was a purely Canadian project.

The CHAIRMAN: Mr. Hellyer.

Mr. SMITH (*Calgary South*): Perhaps you will remember, Mr. Pearkes—if I may ask this last question, Mr. Chairman—the estimates committee in their report stated—and I propose to ask you a question: this was, incidentally, passed and supported by all parties:

—the committee does express its concern in the government entering into any subsequent weapon program of this magnitude without first negotiating for some cost-sharing agreement with either NATO member countries or the U.S.A. under the NORAD agreement.

My question is: in your belief, would it have been better to have proceeded with at least some firm understanding that some cost-sharing agreement should have been entered into prior to the development of a program of this magnitude?

Mr. PEARKES: I doubt whether it was possible to have obtained that. It certainly was not obtained.

Mr. SMITH (*Calgary South*): You do not think it would have been possible, under any circumstances?

Mr. PEARKES: That is my opinion. I do not think the United States would have been prepared at any time to have entered in. But that is purely an opinion. I was not Minister of National Defence at the time.

There is nothing to indicate that the United States were prepared to enter into any cost-sharing or make any direct contribution to the development of this aircraft. No direct United States contribution was ever made.

Mr. SMITH (*Calgary South*): Of course, the NORAD agreement had not been established at this time?

Mr. PEARKES: The NORAD agreement had not been established.

Mr. HELLYER: Mr. Minister, you have obviously been checking through some of the records of the previous government. Would you say that, in respect to the CF-100, the conditions were the same, that there was no commitment during the course of development of that aircraft that it would be used for mutual aid or by other countries, and it was only after it had become a production reality that sales were effective?

Mr. PEARKES: I would be of opinion that that was correct. The construction of the CF-100 took place long before I became Minister of Defence; but I have never heard that there was any commitment made. The officials have indicated that my statement is correct.

Mr. HELLYER: I think that is correct, Mr. Minister. At the time the Avro Arrow was cancelled, you have indicated to the members of the committee that there were three factors; the cost, the performance, and the reducing threat.

Can you give us an indication as to which of these bore the major share of the decision—the factor in the decision; and also if, in your opinion, at the time the cancellation was made, there was a continuing military requirement for manned interceptors by the R.C.A.F. defence squadrons?

Mr. PEARKES: I think it would only be a matter of opinion, and opinions would vary as to the relative importance which was placed on those three factors. They all contributed, and I would not say that one or the other contributed more. They were all important factors in reaching the decision.

Regarding the need for an interceptor, as seen at that time, the chiefs of staff were instructed to investigate the possibility of obtaining another aircraft at a cheaper price to replace the CF-105. That was stated in the

House of Commons by the Prime Minister when he gave his statement, that the chiefs of staff were being instructed to investigate and see whether there was any other aircraft of proven design that was available.

Mr. HELLYER: What was the result of that investigation?

Mr. PEARKES: No decision was taken at that time for a replacement of the CF-100.

Mr. HELLYER: None has been taken since, apparently. Can the minister say whether the matter is still under consideration?

Mr. PEARKES: The matter is still under consideration.

Mr. HELLYER: Does the minister feel there is still a requirement for a manned interceptor?

Mr. PEARKES: As long as there is a bomber threat, manned interceptors would be a requirement and a means of defeating the bomber threat.

I must point out that we are in partnership, or in alliance with the United States, and it is not essential that both of those partners provide every component of the defence requirement.

Mr. HELLYER: But you do feel it is essential that each partner provides some component?

Mr. PEARKES: I feel that as long as a bomber threat remains, it is essential—there is a partnership, and there should be an agreement as to the types of defence which are provided; and those types of defence include such things as the warning system, interceptors, the ground-to-air missiles, and so forth.

Mr. HELLYER: But in each partnership it is normal that each partner would contribute something you need, some special participation to which they are best suited?

Mr. PEARKES: It is not at all essential that each partner provides a portion of those three component parts. If we look at the matter of defence as a whole, it is quite reasonable to think that one partner might contribute all of one, and none of another component.

Mr. HELLYER: I would like to read a short statement you made to the estimates committee on July 4, 1958, if I may, to see if you still agree. You are quoted as having said:

The developments in guided missiles, both surface-to-air and air-to-air and the use of atomic warheads on these missiles, show great promise of increasing the effectiveness of our air defences. It is logical therefore that Canada should adopt weapons of this nature in the near future. There are, however, important factors necessitating the continued use of manned interceptors in the air defence system for many years, indeed for as far as we can see into the future—

At page 325, estimates committee, you said further:

The manned interceptor can be used in the identification role, whereas surface-to-air missiles cannot. Identification is one of the most difficult problems with which the air defence commander is faced. Even though there are certain limitations to the manned interceptor in this task, nevertheless since the final and critical decision to launch massive retaliation may well depend upon a positive identification of a number of unknown aircraft in the system as "hostiles" and since failure to launch our defensive and retaliatory forces in time could bring about a decisive defeat of unprecedented magnitude, the inclusion of manned interceptors able to assist in the problem of identification is essential.

Mr. SMITH (*Calgary South*): What is the page reference?

Mr. HELLYER: I do not have the page; I am sorry.

The CHAIRMAN: That is taken from the estimates committee of 1958-59.

Mr. HELLYER: Does the minister still feel this is a fair statement of need?

Mr. PEARKES: As we are considering the expenditures of 1958-59, I think that is a fair statement of conditions as they were at that time.

Mr. HELLYER: Do you think conditions have changed since?

The CHAIRMAN: We are still in 1958-59, Mr. Hellyer.

Mr. SMITH (*Calgary South*): It is a matter of record that you have since amended that view.

Mr. HELLYER: I think this is important, Mr. Chairman. We can pursue it now, or later; but I would like to know if the minister still feels that the identification requirement is the same as it was then.

The CHAIRMAN: That is still 1958-59. When we get on to 1960-61, if you wish to ask that question —

Mr. HELLYER: This is germane to the cancellation of the aircraft at that time, or the decision not to have used the savings for the purchase of another manned aircraft for this purpose at that time.

The CHAIRMAN: If the minister wishes to make a comment, he can. You asked him the question, does he still believe exactly the same thing as he did when he made the statement in the 1958-59 estimates. He said that if he was doing it again, he would do exactly the same thing, at that time.

Mr. HELLYER: That is right. Let me ask this question, then. If the minister felt that the identification role was important at that time, that it was in fact a military requirement, why did he not immediately use the money saved from the cancellation of the Avro Arrow for the purchase of other manned interceptors to carry out this dual role of interception and identification?

The CHAIRMAN: That is in 1958-59?

Mr. HELLYER: Yes.

Mr. PEARKES: That is very simple to answer. You cannot obtain another aircraft just as quickly as that, just at a moment's notice, and as there was a great deal of money involved, it was necessary to make a very careful examination of the different types of aircraft which were available. That examination started before the cancellation of the Arrow.

Mr. HELLYER: How long before the cancellation?

Mr. PEARKES: You will recall that in September of 1958 a change was made, that development would be continued until March of 1959. It was during that period that investigations were being carried out as to other types of aircraft which might be available. It is normal procedure with the air force to keep up-to-date information as to the different types of aircraft that there are.

Mr. HELLYER: If the investigation was carried on for these several months, why was the minister not in a position to make a decision either before or immediately after the Avro Arrow was cancelled? As a matter of fact, you told us in your statement that the possibility of cancelling this program had been under consideration for even a longer period of time.

Why was not the air force and the minister in a position to state its alternative immediately, if not before, this decision was announced?

Mr. PEARKES: We were not in a position to make such a statement. We had not decided what type of aircraft, if any, should replace the CF-100. Mind you, the CF-105 was not to be available until the end of 1961 or the beginning of 1962.

Mr. SMITH (*Calgary South*): The CF-105.

Mr. PEARKES: The CF-105 was not to be available until the end of 1961 or the beginning of 1962.



Mr. HELLYER: When you say, not available, I understand that some—

Mr. PEARKES: Not for operational use in the squadrons.

Mr. HELLYER: I understand from some people that the production rate would have made it possible to have installed the first squadrons in the early part of 1961. Would you say that is correct?

Mr. PEARKES: No; the information I had was that they would not be in squadron operation until the end of 1961 or the beginning of 1962.

Mr. SMITH (*Calgary South*): Have you not stated that during the period under consideration the present squadrons of CF-100's and Sabres were at that time adequate for their role of identification?

Mr. PEARKES: They were the aircraft which we had available, and it was considered that they would be able to carry out their role until they were replaced by the CF-105.

Mr. HELLYER: This is an interesting question, and an important one, that has been asked. It was considered that they would be able to carry out their role. Did the Russians have, in 1958, any Bear or Bison aircraft?

Mr. PEARKES: I think so, yes. I can say that definitely they did; they did have Bear and Bison aircraft, definitely.

Mr. HELLYER: Can the CF-100 intercept and identify Bear and Bison aircraft?

Mr. PEARKES: Yes, it was considered that the CF-100 would be capable of intercepting the type of aircraft that the Russians had at that time.

Mr. HELLYER: But that would be only in the condition that they met them head on, because if you gave them any kind of a head start, the CF-100 would never be able to catch them; is that correct?

Mr. PEARKES: I would not think so.

The CHAIRMAN: Are not we going into the realm of fantasy here?

Mr. HELLYER: It is not fantasy at all, Mr. Chairman, because the speeds of these aircraft are comparable, but the Russian aircraft have a higher altitude than the interceptors. This is a very relevant question as to just how our air defence squadrons would be able to identify, let alone intercept, the aircraft the Russians had in 1958.

Mr. PEARKES: No plans had been made to replace the CF-100 before the beginning of 1961, and the opinion as to whether they were able to carry out their role, or not, is immaterial. They were the only aircraft we had at that time, and my opinion is—and other people can have different opinions—that they would have been able to meet the Russian bomber threat at that time.

Mr. HELLYER: Is it not true that the air force had recommended, even for this interim period, the introduction of the CF-100, Mark VI, with its missile having a greater capability than the Mark V, to improve the position during the period until the CF-105 was available?

Mr. PEARKES: Some development was going on for a new mark of the CF-100 known as the Mark VI. That was cancelled in the summer of 1957.

Mr. HELLYER: Is it not true that that mark was intended to fill the gap during this period, 1958-59-60, until the Avro Arrow was available?

Mr. PEARKES: It was considered, at one time, to be an advance on the Mark V, but after due consideration the government decided to cancel it, as it was thought the development of the mark VI CF-100 was not justified.

Mr. HELLYER: The reason you gave at the time was the superior CF-105 would be soon available.

Mr. PEARKES: That is one of the reasons.



Mr. HELLYER: I wonder, Mr. Minister, if you could tell us when your decision to cancel the Avro Arrow was made?

Mr. PEARKES: It was announced in the house on February 20.

Mr. HELLYER: Was the decision not taken before that?

Mr. PEARKES: Well, it certainly was taken before that. It was announced on that day. I do not think, for one moment, the Prime Minister made the decision while he was sitting in the house that afternoon.

Mr. HELLYER: Then you are saying the Prime Minister did make the decision. But subsequently he indicated that the company should have known from September the cancellation was inevitable, so, presumably, there was some notification?

Mr. PEARKES: You will recall the Prime Minister did make an announcement in September, was it not, that they were investigating the possibility of building a modified form of Arrow—a modified fire control and weapons system. There were indications at that time, and there had been previous indications over a number of years, that if changed conditions came about it might be necessary to cancel the project.

Mr. HELLYER: Correct. But the Prime Minister gave the impression the company should have known cancellation was inevitable. Would you agree on that?

Mr. PEARKES: Yes, I would.

Mr. HELLYER: Did you at any time, between September and February, tell the company that cancellation would be announced shortly?

Mr. PEARKES: No, because they were not told cancellation would be announced at any particular time.

Mr. HELLYER: Would you agree that during that period you told the company that, in your opinion, limited production would be proceeded with, in any event?

Mr. PEARKES: No, I am quite certain I never told them that.

Mr. WINCH: Could I ask a question on this?

The CHAIRMAN: Go ahead, Mr. Winch.

Mr. WINCH: While the minister is on this phase, would he give us what was the contractual basis or understanding with A. V. Roe on the development of the Arrow; and what was the agreement with the company in the event of cancellation? What was the basis of the contract, as to how they would carry on; and what was the understanding as to any cancellation, and what the situation would be in that event?

Mr. PEARKES: I am not in a position to give you that information, because the contracts were arranged through the Department of Defence Production. I have not the actual contract.

Mr. WINCH: Mr. Chairman, would we be permitted, under our terms of reference, to obtain that information, as it comes under Defence Production? It certainly deals with the whole question of the Arrow.

The CHAIRMAN: I would like to consider that, Mr. Winch, if I might; and I will give you an answer on that later. I want to talk it over with the speaker of the house.

Yes, Mr. Carter?

Mr. CARTER: Has Mr. Hellyer finished?

Mr. HELLYER: No, but go ahead.

Mr. CARTER: In the second paragraph on page 3 of the minister's statement, it says:

—when this aircraft was first conceived neither the United States nor the United Kingdom had in their planning any comparable aircraft.

I presume the period the minister is referring to is in 1953. So, in 1953, neither the United States nor the United Kingdom had in their planning any comparable aircraft.

How does it happen that Canada is ahead of these two countries in this type of planning? Have we made a better appraisal of the requirements of the future; or were they slow in assessing the needs? Did we have better intelligence?

I would like to know, how come we are not thinking alike in judging the same situation, in assessing what the future would require?

Mr. PEARKES: I think there are certain special conditions, as far Canada is concerned—wide spaces, and that sort of thing.

I think credit must be given to the Royal Canadian Air Force for being alert to the situation, and having appreciated the fact, as I said yesterday, that the turbo-prop and jet were coming into the Russian inventory of weapons.

I give credit to the officers of the Royal Canadian Air Force, at that time, for being in the forefront of thought as to the type of requirement.

However, it must be remembered that we have special conditions, and the CF-100 was an aircraft which was designed to meet those special conditions, as they then existed.

Thinking of the CF-100, it was a stage of progression to think of a replacement for that, such as the CF-105, which was contemplated.

Mr. CARTER: But, primarily, it was to meet a manned bomber?

Mr. PEARKES: Certainly.

Mr. CARTER: That threat would be the same for the United States, which has a comparable space to defend as Canada does. And yet we are ahead of the United States, even where conditions are comparable.

Mr. PEARKES: That is my impression—we were ahead in our thinking of the United States at that time—but my information may not be absolutely complete. The United States Air Force themselves may have been planning, but there was no development being done at that time of an aircraft having the same characteristics as the CF-105.

Mr. CARTER: How long was it after we had given the lead that they decided we were right and they decided to develop a plane comparable to the CF-105?

Mr. PEARKES: I think one must say it was very shortly after we had decided to go ahead with the CF-105 that the Americans began to develop what I call their Century series—the 101, the 102, and so on.

The CHAIRMAN: Mr. Winch, the reason I asked to withhold a decision on your question until tomorrow is because this is an agreement made by a former government, and we want to be as fair on this thing as we can. Thus, I would just as soon talk it over with the speaker of the house.

Go ahead, Mr. Carter.

Mr. CARTER: I was waiting for the minister. You have something more to add?

Mr. PEARKES: The deputy minister was just pointing out to me that the CF-105 was a long-range, 2-seater aircraft—or, comparatively long-range, up to somewhere between three and five hundred miles; whereas the United Kingdom would not have the need for that type of aircraft.

Mr. CARTER: I am not thinking so much about the United Kingdom, but the United States. Apparently, the Century series or class is the 106. You said they were planning the 102 and the 103. I would like to know when they got around to this 106.

Mr. PEARKES: The 106 is a single-seater aircraft. The 102 is a single-seater also.

Mr. CARTER: Which one is comparable to the Arrow?

Mr. F. R. MILLER (*Deputy Minister, Department of National Defence*): If I might answer that?

The CHAIRMAN: Yes, Mr. Miller.

Mr. MILLER: There is no airplane strictly comparable to the Arrow. The geographic conditions in the United States and the complexity of their ground-control led them to the conclusion that a single-engine, single-place airplane, working under their sophisticated ground-control environment, could do the job; and a single-seater, single-engine airplane is a cheaper airplane.

As far as the United Kingdom is concerned, the requirements are very different. They have a very restricted early-warning capability; and they have to depend on very fast reaction time and a high rate of climb within, again, a small area. So their requirement for range and the ability to control an airplane from the ground with the much more limited space in which they fight, is different from ours.

The requirements that led to the 105 was a long-range, twin-engined aircraft, for reliability, so that if one engine went out you would have a second one. You need a navigator as well as a pilot for operating in areas where ground-control assistance is not available.

Mr. CARTER: I understood the whole purpose of going into the partnership with the United States and the whole purpose of letting them have bases in Canada was that in the event of attack they would intercept the hostile aircraft as far away from the State as possible, which would be over Canadian territory. Surely, in those circumstances, the conditions they would have to meet would be the same conditions as the Canadian aircraft?

Mr. PEARKES: You must recall the NORAD agreement was not made at that time.

Mr. CARTER: Can you say to what stage the Arrow had been developed when the agreement was made?

Mr. PEARKES: The NORAD agreement was made in 1957.

Mr. CARTER: The Arrow was then well developed?

Mr. PEARKES: The Arrow was in the course of development. No Arrow had flown in 1957.

Mr. CARTER: The United States still had no plane which was comparable to the Arrow, and which could defend the United States in the same way as could be done with the Arrow?

Mr. SMITH (*Calgary South*): The word "comparable" is rather an unusual word to use here. I am suggesting, while it seems to me it is a different aircraft, the inference is left by the word "comparable" that there was no other airplane that could do the same job. This is not the impression you intended to convey, is it?

Mr. MILLER: Perhaps "comparable" is not the best word. You might say, "have the same characteristics." They will do the job, but the conditions under which they do it are different. We think factors are of relative importance, in a different way from those the American designers and operators do.

Mr. SMITH (*Calgary South*): But you would not leave the impression that it could not be done by another aircraft?

Mr. MILLER: No.

Mr. HELLYER: On that question, exactly the same could not be done by another aircraft unless it also had twin-seats, twin engines and a navigator. They are similar, but perhaps not comparable. Is that not correct?

Mr. MILLER: This is a question of degree—how well, how effective.



Mr. PEARKES: The Americans, at this time, were beginning to think of a longer-range aircraft, such as the 108.

Mr. CARTER: I have two other questions.

I gather from the picture which Mr. Miller painted that our friends in the States were thinking of a smaller aircraft which could fit in with their more thickly populated conditions, with more numerous air fields, and so forth—in other words, not so sparsely populated conditions as we have in Canada. But what is bothering me is this: The whole purpose of having a partnership with the United States, and the whole system of defence, depends on intercepting hostile aircraft as far away as possible.

The CHAIRMAN: So, what is your question, Mr. Carter?

Mr. CARTER: Does the United States today, in Canadian bases, have any aircraft that can do the job that the Arrow was designed to do?

Mr. PEARKES: Not exactly.

The CHAIRMAN: Any further questions, Mr. Carter?

Mr. CARTER: Just one more. I would like to know what stage of development the Arrow had reached when the United States decided to go ahead with their 106, or the one that comes nearest to meeting the specific qualities of the Arrow, the specific requirements that the Arrow was designed to meet?

Mr. PEARKES: I do not think we have that information, exactly, because that is United States information. But it was obvious they started into their Century class of aircraft very shortly after development of the CF-105 started.

Mr. CARTER: Do you think—and I put it in the form of a question, though it is more of a statement—

The CHAIRMAN: Make it a question, please, Mr. Carter.

Mr. CARTER: I will prefix it with “do you think”—with the lack of co-operation evinced by the United States, that we should have entered into NORAD without having that covered—that there would be honest-to-goodness co-operation we do not seem to have got in the past and which we do not seem to be getting now?

Mr. PEARKES: I cannot agree with that statement, because I think we have had a lot of co-operation with the United States; and that that co-operation has increased and become more real since the formation of NORAD.

Mr. CARTER: But from your own words, the statement you just made a little while ago, the Americans—who have asked our co-operation, and we have given them bases, and upon whom we rely for the defence of Canada, to a large extent—they still do not have anything that can do the work the Arrow was designed to do.

The CHAIRMAN: When did we go into NORAD, Mr. Minister?

Mr. PEARKES: We went into NORAD in the summer of 1957.

Perhaps it might be useful to put down on the record the actual radius of performance of the Arrow, so there can be no doubt about that?

The CHAIRMAN: That will be interesting.

Mr. PEARKES: I give it under three headings. The supersonic combat radius of action is 354 nautical miles; that would be 407 statute miles.

Mr. CARTER: Is that a return trip, out and back?

Mr. PEARKES: That is the radius.

Mr. CARTER: The total?

Mr. PEARKES: That is going from its air base, at supersonic combat radius, out to a point 354 miles away, and return.

The CHAIRMAN: Did you say those 354 miles were—



Mr. CARTER: —nautical miles.

Mr. PEARKES: Yes, 354 nautical miles. The subsonic combat radius of action is 506 nautical miles.

Mr. HELLYER: What is that translated into—

Mr. PEARKES: —translated into ordinary miles?

Mr. HELLYER: Yes, into ordinary miles?

Mr. PEARKES: That is 582 statute miles. The radius for ferrying, or for moving, would be 750 miles in a non-combat state.

The CHAIRMAN: That is nautical miles?

Mr. PEARKES: Yes, 750 nautical miles; which is 862 statute miles.

Mr. HELLYER: Actually, Mr. Minister, that seems, from your statement, to have exceeded the specifications with respect to range?

Mr. PEARKES: The specifications changed at various times. I believe the original specifications which were set down exceeded the 300 miles, but at a lower altitude. Then the changes were made, to increase the altitude.

Mr. HELLYER: How would these ranges compare with the Century class interceptors the United States has at the present time?

The CHAIRMAN: We are getting into the present time again, Mr. Hellyer. If you wish to answer that, go ahead, Mr. Minister.

Mr. PEARKES: No, I do not think I should give information regarding the capabilities of aircraft of another power.

The CHAIRMAN: No. Any other questions, Mr. Carter?

Mr. CARTER: No, thank you.

The CHAIRMAN: Mr. Forgie?

Mr. FORGIE: Two questions. Prior to the cancellation of the Arrow contract, what was the attitude of NORAD towards that cancellation?

Mr. PEARKES: NORAD was formed in the summer of 1957. The attitude of NORAD at that time was that there should be a comprehensive defence program. They suggested a number of changes in the defence program; and the matter of the possibility of cancelling the CF-105 was discussed with the NORAD commander at that time. His advice was taken into consideration, when the whole matter of the cancellation was under consideration.

Mr. FORGIE: I take it, from your remarks, that he was in favour of the government carrying on the construction of the Arrow.

Mr. PEARKES: I did not say so, because I do not think it is correct to give out publicly the advice, whether it is favourable or unfavourable—the professional advice of, shall I say, local commanders. After all, the NORAD commander is a joint commander. He makes his recommendations to the joint chiefs of staff. The joint chiefs of staff consider those recommendations. They give their advice to the government, and make their recommendations to the government. The government has to make the decision as to whether it accepts or rejects the advice.

Mr. HELLYER: I think you wish to be consistent in this. Did you not recently quote General Kuter in support of a continuation of the Bomarc program?

The CHAIRMAN: What was the question?

Mr. PEARKES: I do not recall it.

Mr. SMITH (*Calgary South*): It was a public statement.

Mr. PEARKES: He made a public statement. I do not know that I ever quoted that.

Mr. HELLYER: I thought I heard you say it in the house.

Mr. PEARKES: I do not think I have said it in the house. I do not think I have quoted General Kuter in the house. I do not think I have.

Mr. SMITH (*Calgary South*): He made this public statement.

Mr. PEARKES: He made this statement. Yes, he made a public statement.

Mr. CHAMBERS: Is it not generally true that all field commanders, at all times, want as many weapons and with as high a performance as they can get?

The CHAIRMAN: That is par for the course.

Mr. FORGIE: I have one more question to ask the minister—and he may consider that it is not a proper question for him to answer. What advice did NORAD give the government prior to the cancellation of the Arrow contract?

The CHAIRMAN: It is out of order.

Mr. PEARKES: I do not think I should answer this question.

Mr. BALDWIN: Could the minister give us the date of that memorandum which he read—some time in 1925?

The CHAIRMAN: 1925?

Mr. BALDWIN: 1955, I think I said—the memorandum regarding the attempts of the then government?

The CHAIRMAN: That was the memorandum which the minister stated, if he read that, possibly he was a little out of line, because that was a decision of a previous government.

Mr. FORGIE: I wonder if I could ask this question in regard to that. Would the minister agree with my interpretation of that statement, as indicating a clear knowledge at that time that it was held desirable, or even necessary, to secure some form of cost sharing arrangement with the United States?

Mr. PEARKES: I do not think in 1955 the thought of cost sharing for the production of an aircraft was given consideration. Previous to that there had been an arrangement made by the previous administration, between the Canadian government and the United States government, for cost sharing, in connection with the Pinetree line.

Mr. SMITH (*Calgary South*): Looking at 1953, you were looking at a total cost, representing more than half of your total defence budget, which the Arrow program at that time represented. Would you not have considered it advisable to enter into some cost sharing agreement, if you had been minister as of that date?

Mr. PEARKES: I do not think I should answer that question.

The CHAIRMAN: That type of question puts the minister in a spot. It is not fair to our witness, and I would ask the members of the committee not to ask such questions.

Mr. SMITH (*Calgary South*): I am attempting to be fair; I am only asking for an opinion on what is an obvious fact.

Mr. HELLYER: I would just like to say that the minister has been answering the questions fairly, and I appreciate it.

Mr. BALDWIN: In any event, let us say that that memorandum dealt solely with the possibility of securing some participation in orders for the aircraft from the United States.

Mr. PEARKES: Every endeavour was made, not only by myself, but by my predecessor, in order to get orders from the United States for those aircraft we were developing. It was a Canadian endeavour to develop this particular aircraft, and they hoped they would be able to sell it to other countries. However, unfortunately, in spite of every effort that was made, this was not achieved.

Mr. BALDWIN: But that memorandum was an indication of the intention of the then government to try and secure such orders.

Mr. PEARKES: I read that out as an indication to show that the previous administration had been trying to get orders for this aircraft in the United States.

Mr. BALDWIN: And with negative results.

Mr. PEARKES: With negative results—just exactly the same as my own endeavours.

Mr. BALDWIN: At that time, what was the contractual obligation of the government, in so far as this project was concerned, in 1955.

Mr. PEARKES: The agreement was to assist in the development of this aircraft. There was no contract let for production of the aircraft. Canada was contributing toward the cost. You are talking about—

Mr. BALDWIN: 1955. What was the limit of our firm and contractual obligation at that time?

Mr. PEARKES: In 1955. I will get the deputy minister to give you the actual figures.

Mr. MILLER: In 1953, the decision was made to proceed with 40-pre-production aircraft; in other words, to continue the development.

Mr. BALDWIN: I had that in mind when I asked the minister for the date of the memorandum which he read out. I wanted to find out whether that memorandum was prior to this decision to proceed with the development project involving \$280 million.

Mr. PEARKES: That was in 1955.

The CHAIRMAN: I refer you to page 3 of the statement. I do not know whether this answers your question.

In March, 1955 a development project covering 40 pre-production aircraft and a new engine was approved in the amount of \$280 million.

Mr. PEARKES: This was in November, 1955. The then Minister of National Defence was instructed by his government to proceed to Washington, and to try to conclude a deal.

The CHAIRMAN: You are next, Mr. Lambert.

Mr. BALDWIN: Mr. Chairman, I have one more question. You say, at page 2 of your statement:

Early estimates as to cost were from \$1½ million to \$2 million per plane.

And then, on page 6 you say:

In fact, the costs had risen from an early estimate of \$1½ million to \$2 million per plane, to \$12.5 million, that is, \$12,500,000 per plane, if it had included the original fire control system, or \$7,800,000, if the alternative or modified fire control system had been introduced.

Would it be possible to give us a statement now, or possibly at a later time, showing the progressive steps which led to the increase in cost from \$1½ million per plane to \$12½ million per plane? You have touched on that at different times, but I think it would be better if it was all together in one statement.

Mr. PEARKES: That is, setting out the different steps. It was for a variety of reasons. I explained, in general, yesterday, the main reasons—the reduction in the numbers, when they were not going into the auxiliary forces; the extra costs; the introduction of the new engine; and all those things were added up. But, if you want it step by step—



Mr. BALDWIN: I thought if it was contained together in one particular statement—and it could be quite brief, as far as I am concerned—it would be better.

The CHAIRMAN: That can be produced.

Mr. CARTER: On that point, Mr. Chairman, I would like to have the comparable figures for the CF-100. What I mean is this. The figures the minister is going to produce will include the development cost based on the production of a certain number, and I would like to have the comparable figures for the CF-100, including the development cost.

Mr. PEARKES: That would mean going back—

The CHAIRMAN: Into antiquity.

Mr. PEARKES: I do not know when the CF-100 was started, but it was during the war.

Mr. CARTER: I do not see what significance the implication would have.

The CHAIRMAN: It does not really matter. One of the members of the committee wants some information, and the minister has agreed.

Mr. CARTER: I also have asked for information.

The CHAIRMAN: But it is impossible to go back to records that are not available, to find these things out. If you wish anything modern, or—

Mr. CARTER: All I am requesting is this. If the minister is going to produce the figures for the eleven aircraft—the ones that were cut back—and include the development cost of the first eleven, could we not have the same figures for the total development cost for the first eleven CF-100's?

Mr. CHAMBERS: Are we not getting a little away from the expenditures of 1958-59, in both these questions?

The CHAIRMAN: Actually, we are.

Mr. CHAMBERS: The figures the minister mentioned in his statement, at each stage, were estimates. When we say: "\$1½ million", this was the best estimate at the beginning of the program. It could not be an exact price, because the aircraft was not produced. The same thing is true of the final figure. It was the best estimate at this time. I do not know what information the committee would gain by going into it step by step, and asking for the reasons for the change in the estimates in relation to this item in the 1958-59 expenditures. The same thing is true in the case of the CF-100.

The CHAIRMAN: Is it a point of order, Mr. Carter?

Mr. SMITH (*Calgary South*): Then, my question would be ruled out of order. However, at some point, when we come to the 1960-61 estimates, I would like to have the probable cost of comparable aircraft that would be considered as a replacement—and I am speaking of United States aircraft. This could be provided when we are considering 1960-61.

The CHAIRMAN: The Chair will rule that we will have those, if they are available, for 1960-61. Let us try to keep to 1959-60 now.

You are next, Mr. Lambert.

Mr. LAMBERT: You indicated that shortly after the commencement of the CF-105 development program, the United States inaugurated their Century series. Obviously, they have gone as far as the CF-108, and in that family of aircraft there would be either one or two, or perhaps three, which were of a similar type and played a similar role to that of the CF-105. Now, it is said those aircraft were developed to a point and then phased out—they were dropped. Have you any information as to when the United States dropped development of aircraft which were similar to the CF-105?

Mr. PEARKES: I think that question is very difficult to answer, because there are no aircraft in the United States exactly comparable to the CF-105.



The United States have in their air force today, the 101, with various models; the 102, with various models, and the 106, with various models—and those are the main ones. There was a 108, which was under development, but the development of the 108, I think, was cancelled early this year.

Mr. HELLYER: But the 108 was of a different order of development than the 106 and the Canadian 105; it was to use a different type of fuel.

Mr. PEARKES: It was a much longer range reconnaissance aircraft.

Mr. HELLYER: The United States has, in fact, not scrapped any aircraft which were closely similar to the 105.

Mr. PEARKES: They still have in their air force types which are—

Mr. HELLYER: Of the same vintage.

Mr. PEARKES: Of the same general characteristics, although none are exactly identical.

Mr. FORGIE: I have a supplementary question.

Mr. LAMBERT: My question is a supplementary one.

Is there any indication, during this development program of the CF-105, and the doubts about its ultimate use as an operational aircraft, that the Americans approached the Canadian government with respect to the use of any of their aircraft?

The CHAIRMAN: During the 1958-59 period?

Mr. LAMBERT: Yes.

Mr. PEARKES: I do not think that there were any offers made by the United States, or any attempt by the United States to sell interceptor aircraft to Canada at that time.

The CHAIRMAN: During that period.

May we leave it at that point. Mr. Forgie, you will start questioning on Friday morning, at 9.30.

—The committee adjourned.

## APPENDIX "A"

FINANCIAL POSITION OF MARRIED ACCOMPANIED PERSONNEL OF 1 AIR DIVISION (RCAF) AND  
CANADIAN INFANTRY BRIGADE DURING OVERSEAS TOUR OF FOUR YEARS

Requested by Mr. Carter and Mr. Baldwin.

		Effect of Loss in Family Allowance			Additional Allowances Received		
		(1)	(2)	(3)	(4)	(5)	
Location	Rank	Number of Children*	Loss of Family Allowance	Saving in Income Tax	Net Loss (1) - (2)	Special Allowance**	
						Foreign Allowance*	Married Quarters Provided Married Quarters not Provided
			\$	\$	\$	\$	\$
UNITED KINGDOM.....	Leading Aircraftman.....	3 (a) 5 (b)	864.00 1,536.00	225.60 Nil	638.40 1,536.00	432.00 432.00	Nil Nil
	Sergeant.....	3 (a) 5 (b)	864.00 1,536.00	422.40 271.20	441.60 1,264.80	576.00 576.00	Nil Nil
	Wing Commander.....	3 (a) 5 (b)	864.00 1,536.00	664.80 1,029.60	199.20 506.40	1,296.00 1,296.00	Nil Nil
	Leading Aircraftman.....	3 (a) 5 (b)	864.00 1,536.00	225.60 Nil	638.40 1,536.00	432.00 432.00	1,536.00 1,536.00
	Sergeant.....	3 (a) 5 (b)	864.00 1,536.00	422.40 271.20	441.60 1,264.80	576.00 576.00	1,728.00 1,728.00
	Wing Commander.....	3 (a) 5 (b)	864.00 1,536.00	664.80 1,029.60	199.20 506.40	1,296.00 1,296.00	2,304.00 2,304.00
FRANCE..... Metz only	Leading Aircraftman.....	3 (a) 5 (b)	864.00 1,536.00	225.60 Nil	638.40 1,536.00	432.00 432.00	1,536.00 1,536.00
	Sergeant.....	3 (a) 5 (b)	864.00 1,536.00	422.40 271.20	441.60 1,264.80	576.00 576.00	1,728.00 1,728.00
	Wing Commander.....	3 (a) 5 (b)	864.00 1,536.00	664.80 1,029.60	199.20 506.40	1,296.00 1,296.00	2,304.00 2,304.00
	Leading Aircraftman.....	3 (a) 5 (b)	864.00 1,536.00	225.60 Nil	638.40 1,536.00	432.00 432.00	1,536.00 1,536.00
	Sergeant.....	3 (a) 5 (b)	864.00 1,536.00	422.40 271.20	441.60 1,264.80	576.00 576.00	1,728.00 1,728.00
	Wing Commander.....	3 (a) 5 (b)	864.00 1,536.00	664.80 1,029.60	199.20 506.40	1,296.00 1,296.00	2,304.00 2,304.00
FRANCE..... Other than Metz	Leading Aircraftman.....	3 (a) 5 (b)	864.00 1,536.00	225.60 Nil	638.40 1,536.00	432.00 432.00	1,536.00 1,536.00
	Sergeant.....	3 (a) 5 (b)	864.00 1,536.00	422.40 271.20	441.60 1,264.80	576.00 576.00	1,728.00 1,728.00
	Wing Commander.....	3 (a) 5 (b)	864.00 1,536.00	664.80 1,029.60	199.20 506.40	1,296.00 1,296.00	2,304.00 2,304.00
	Leading Aircraftman.....	3 (a) 5 (b)	864.00 1,536.00	225.60 Nil	638.40 1,536.00	432.00 432.00	1,536.00 1,536.00
	Sergeant.....	3 (a) 5 (b)	864.00 1,536.00	422.40 271.20	441.60 1,264.80	576.00 576.00	1,728.00 1,728.00
	Wing Commander.....	3 (a) 5 (b)	864.00 1,536.00	664.80 1,029.60	199.20 506.40	1,296.00 1,296.00	2,304.00 2,304.00

BELGIUM.....	Leading Aircraftman.....	3 (a) 5 (b)	864.00 1,536.00	225.60 Nil	638.40 1,536.00	432.00 432.00	1,680.00 1,680.00	3,120.00 3,120.00
	Sergeant.....	3 (a) 5 (b)	864.00 1,536.00	422.40 271.20	441.60 1,264.80	576.00 576.00	1,920.00 1,920.00	3,360.00 3,360.00
	Wing Commander.....	3 (a) 5 (b)	864.00 1,536.00	664.80 1,029.60	199.20 506.40	1,296.00 1,296.00	2,880.00 2,880.00	4,320.00 4,320.00
	.....							
GERMANY.....	Leading Aircraftman.....	3 (a) 5 (b)	864.00 1,536.00	225.60 Nil	638.40 1,536.00	432.00 432.00	720.00 720.00	1,440.00 1,440.00
	Sergeant.....	3 (a) 5 (b)	864.00 1,536.00	422.40 271.20	441.60 1,264.80	576.00 576.00	720.00 720.00	1,440.00 1,440.00
	Wing Commander.....	3 (a) 5 (b)	864.00 1,536.00	664.80 1,029.60	199.20 506.40	1,296.00 1,296.00	720.00 720.00	1,440.00 1,440.00
	.....							
ITALY..... (Sardinia)	Leading Aircraftman.....	3 (a) 5 (b)	864.00 1,536.00	225.60 Nil	638.40 1,536.00	432.00 432.00	N/A	4,080.00 4,080.00
	Sergeant.....	3 (a) 5 (b)	864.00 1,536.00	422.40 271.20	441.60 1,264.80	576.00 576.00	N/A	4,800.00 4,800.00
	Wing Commander.....	3 (a) 5 (b)	864.00 1,536.00	664.80 1,029.60	199.20 506.40	1,296.00 1,296.00	N/A	6,960.00 6,960.00
	.....							

\* (a) Ages of children 2, 6 and 8.

(b) Ages of children 1, 3, 5, 8 and 10.

NOTE: Airmen Ranks of LAC and Sgt based upon Trade Group 3 and 3 years in present rank Officer rank based upon 3 years in rank.

\* *Foreign Allowance*—This allowance is paid to single personnel and to married personnel at the same rates.

\*\* *Special Allowance*—This is a cost of living allowance payable to married personnel only.

## APPENDIX "B"

*Requested by Mr. Hellyer*

PUBLICATIONS  
PRINTED FOR THE R.C.A.F.  
IN 1958-1959

- CAP 15—Organization and Functions of Air Force Headquarters.
- CAP 16—Royal Canadian Air Force Supply Instructions—Volume 3—Packaging
- CAP 23—Manual for Administration, Operation and Servicing of Mobile and Marine Equipment.
- CAP 78—Royal Canadian Air Force Maintenance Requirements
- CAP 179—Postal and Message Addresses for the Royal Canadian Air Force
- CAP 342—Orders for aircraft Control and Services—Volume 2—Radar Approach.
- CAP 425—Security Orders for the Royal Canadian Air Force
- CAP 456—Air Movement Manual for the Royal Canadian Air Force
- CAP 460—Manual of Service Writing for the Royal Canadian Air Force
- CAP 464—Syllabi of Royal Canadian Air Force Training Courses
- CAP 483—Royal Canadian Air Force Officer Branch Specification
- CAP 476—Glossary of Military Terms, Royal Canadian Air Force
- CAP 488—General Service Knowledge Qualifying Examinations
- CAP 484—Manual of Food Services
- CAP 500—Catalogue of Publications in Use by the Royal Canadian Air Force
- CAP 502—RCAF Filing Classification Manual
- CAP 600—Index to Materiel Authorization
- CAP 607—Scale of Issue—Medical Equipment
- CAP 611—Scale of Issue—Telecommunication Equipment
- CAP 619—Checking Lists—M33 (C) Anti-Aircraft Fire Control Systems
- CAP 623—Unit Equipment Table, Air Observers' School
- CAP 634—Unit Equipment Table, Construction and Maintenance Units
- CAP 635—Unit Equipment Table, Repair Depots
- CAP 640—Unit Equipment Table,
  - Volume 1—1 Supply Depot
  - Volume 2—2 Supply Depot
  - Volume 4—5 Supply Depot
  - Volume 5—7 Supply Depot
  - Volume 6—11 Supply Depot
  - Volume 7—30 Air Materiel Base
- CAP 643—Unit Equipment Table, Photographic Establishment
- CAP 653—Checking Lists—Mobile Equipment
- CAP 663—5th Edition Aircraft Equipment Schedule—Mitchell
- CAP 664—5th Edition Aircraft Equipment Schedule—Harvard
- CAP 665—4th Edition Aircraft Equipment Schedule—Expeditior
- CAP 666—4th Edition Aircraft Equipment Schedule—Lancaster
- CAP 667—5th Edition Aircraft Equipment Schedule—Dakota
- CAP 670—Scale of Issue Aircraft Technical Shops
- CAP 671—Aircraft Equipment Schedule—CANUCK
- CAP 674—Aircraft Equipment Schedule C119
- CAP 672—Aircraft Equipment Schedule Sabre
- CAP 673—Aircraft Equipment Schedule T33
- CAP 675—Aircraft Equipment Schedule Piasecki
- CAP 677—Aircraft Equipment Schedule Comet Mk 1A



- CAP 709—Ground Telecommunication Equipment Schedule—Automatic Direction Finder
- CAP 710—Ground Telecommunication Equipment Schedule—LF/MF Beacon Transmitter FRN
- CAP 711—Ground Telecommunication Equipment Schedule—Heavy Radar Height Finder
- CAP 713—Ground Telecommunication Equipment Schedule—Spare Exhibit and Equipment Schedule
- CAP 720—Aircraft Equipment Schedule—Sikorsky
- CAP 721—Aircraft Equipment Schedule—Argus
- CAP 723—Aircraft Equipment Schedule—KDA Target Drone
- CAP 767—Unit Equipment Table—Central Experimental and Proving Establishment
- CAP 769—Unit Equipment Table—Operational Training Unit
- CAP 771—Unit Equipment Table—2 Personnel Selection Unit (Officers)
- CAP 774—Unit Equipment Table—Doppler Mid Canada Early Warning Line
- CAP 775—Unit Equipment Table—Institute Aviation Medicine.
- CAP 776—Unit Equipment Table—Primary Training School
- CAP 781—Unit Equipment Table—Telecommunication Ground (Air Force Headquarters)
- CAP 783—Unit Equipment Table—Telecommunication Ground (Air Defence Command)
- CAP 784—Unit Equipment Table—Telecommunication Ground (5 Air Division)
- CAP 785—Unit Equipment Table—Telecommunication Ground (1 Air Division Metz)
- CAP 786—Unit Equipment Table—Telecommunication Ground (Air Materiel Command)
- CAP 787—Unit Equipment Table—Telecommunication Ground (Air Transport Command)
- CAP 788—Unit Equipment Table—Telecommunication Ground (Training Command)
- CAP 789—Unit Equipment Table—Telecommunication Ground (14 Training Group)
- CAP 790—Unit Equipment Table—Telecommunication Ground (Maritime Air Command)
- CAP 791—Unit Equipment Table—Telecommunication Ground (Tactical Air Command)

*RCAF Pamphlet—*

- No. 3—Notes on the Preparation of Daily Routine Orders
- No. 27—The Care and Use of Films and Projectors
- No. 30/1—5BX Plan Physical Fitness Series
- No. 35—Search and Rescue Atlantic Area
- No. 36—1 Air Division Information Pamphlet
- No. 55—Reference Handbook for Operators of RCAF Mobile Equipment and Marine Craft
- No. 64—A Guide to the Organization of Married Quarters Community Councils
- No. 69—RCAF Aeromedical Handbook for Aircrew
- No. 74—A Guide to the Organization and Administration of a Station Physical Recreation Programme
- No. 75—A Guide to the Organization and Administration of a Station Physical Fitness Programme
- No. 76—A Guide to "Social Recreation" in the RCAF

- No. 78—RCAF Sports Series—Beginning Hockey
- No. 80—RCAF Sports Series—Coach's Manual of Hockey
- No. 81—RCAF Sports Series—The Hammer
- No. 82—RCAF Sports Series—The Discus
- No. 83—RCAF Sports Series—The Javelin
- No. 84—RCAF Sports Series—Hop, Step and Jump
- No. 85—RCAF Sports Series—The Broad Jump
- No. 86—RCAF Sports Series—The High Jump
- No. 94—RCAF Sports Series—Volleyball, Coach's Manual
- No. 95—RCAF Sports Series—How to Play Better Volleyball

*Training Command Publications—*

- 2—Advanced Flying Manual—Silver Star
- 4—Pilots' Navigation Manual
- 6—Harvard Pilots' Check List
- 7—Safety Equipment and Survival Manual
- 8—Students Handbook for Chipmunk—Flying Training
- 9—Pilots' Check List—Silver Star
- 10—Pilots' Operating and Emergency Check List—Dakota
- 11—Pilots' Operating and Emergency Procedures Check List  
Expeditior
- 12—Observer Manual—Volume I, DR Navigation
- 13—Observer Manual—Volume II—Allied Subjects
- 14—Observer Manual—Volume III—Electronic Aids to Navigation
- 15—Observer Manual—Volume IV—Communications Equipment
- 16—Observer Manual—Volume V—Airborne Interception
- 17—Observer Manual—Volume VI—Electronic Theory
- 18—Instruction Handbook for Basic Flying Training
- 19—Procedure for Handling DVA Correspondence Courses in the  
RCAF
- 21—Pilot's Operating and Emergency Procedures—Mitchell
- 24—Search and Rescue, Information Booklet
- 28—Airman's Handbook Station St Johns
- 29—Corporal's Service Training Course Manual

*Trade Study Guides for the RCAF—*

- No. 211—Photographer
- No. 221—Meteorological Observer
- No. 291—Graphic Artist
- No. 303—Surveyor (Construction Engineering)
- No. 313—Draughtsman (Construction Engineering)
- No. 430—Aircraft Instrument and Electrical Maintenance Superintendent
- No. 431—Equipment Technician (Aero)
- No. 433—Instrument Technician
- No. 500—Aircraft Maintenance Superintendent
- No. 502—Aero-Engine Technician
- No. 503—Airframe Technician
- No. 511—Munitions and Weapons Technician
- No. 513—Armament Systems Technician
- No. 561—Safety Equipment Technician
- No. 580—Mobile Equipment Superintendent
- No. 582—Operator Mechanic Mobile Equipment

- No. 658—Supply Technician
- No. 701—Clerk Accounting
- No. 712—Clerk Typist
- No. 713—Clerk Stenographer
- No. 752—Air Force Policeman
- No. 801—Medical Assistant
- No. 934—Recreation Specialist

*Miscellaneous Regularly Scheduled Items*

- Air Force Routine Orders
- Air Force Administrative Orders
- Air Force Engineering Orders
- Queen's Regulations (Air)
- Roundel
- CAP 16 Supply Administration and Accounting Manual Volume I
- Flight Comment
- Canaircommentary
- Royal Canadian Air Force List
- Air Materiel Command Bulletin
- Air Intelligence Summary
- Air Intelligence Technical Studies
- Air Intelligence Guide
- Air Intelligence Briefs
- CAP 10 Royal Canadian Air Force Catalogue of Equipment
- Central Experimental Proving Establishment Reports
- RCAF Observer

**APPENDIX "C"**

*Requested by Mr. Smith (Calgary South).*

Cost of Maintaining Piston-Driven Training Aircraft—1958-59

Type of Aircraft	Total Cost \$
Chipmunk .....	261,188
Dakota .....	921,729
Expeditior .....	801,211
Harvard .....	1,820,078
Mitchell .....	943,573
	<hr/> 4,747,779 <hr/>
Say	4,750,000

## APPENDIX "D"

*Requested by Mr. Winch.*

Cost of Training RCAF Pilot to Wings  
Standard, 1940, 1950 and 1960  
Progressive Increase in Costs

1940—\$32,000—Tiger Moth and Harvard aircraft

1950—\$51,215—Harvard aircraft

1960—\$80,026—Chipmunk, Harvard and T33 aircraft

Reasons for progressive increase in costs shown above are as follows:

1940—Pilots were trained as airmen and graduated as Sgt. Pilots or Pilot Officers; wages were considerably lower than in the post-war years as were the initial and operating cost of Tiger Moth and Harvard aircraft.

1950—Pilots were trained as Flight Cadets and paid as Pilot Officers, and the initial and operating costs of Harvard aircraft had risen sharply over wartime costs, in keeping with the general economy.

1960—Pilots are still trained as Flight Cadets and paid as Pilot Officers; the initial and operating costs of the high performance jet aircraft are much greater than for the aircraft used in 1940 and 1950 and the training is necessarily more complex.



## MINUTES OF PROCEEDINGS

House of Commons, Room 238-S.

FRIDAY, May 20th, 1960.

(6)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Fairfield, Halpenny, Hellyer, Lambert, Parizeau, Roberge, Smith (*Calgary South*), Thompson, Webster, Winch—13.

*In attendance:* Honourable George R. Pearkes, Minister of National Defence; Mr. F. R. Miller, Deputy Minister; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns; Air Commodore Desbarats, Chief of Finance, Royal Canadian Air Force; Mr. D. A. Golden, Deputy Minister, Department of Defence Production.

Before proceeding with the Orders of the Day the Committee dealt with press reports concerning a statement made at the previous sitting on Wednesday, May 18, 1960, by the Honourable George R. Pearkes, in reference to the partnership between Canada and the United States in respect of the air defence of the continent.

Mr. Baldwin asked that a correction be made at page 108 of the printed record of the Minutes of Proceedings and Evidence No. 4, of Wednesday, May 18, 1960. (*See opposite page*).

The Committee resumed from Wednesday, May 18th, consideration of the Expenditures of the Department of National Defence for the fiscal year 1958-59.

The Chairman ruled that the question by Mr. Winch (see page 103), concerning the contractual basis or understanding with A. V. Roe on the development of the Arrow and what was the agreement with the company in the event of cancellation, was in order, for the reason that the Order of Reference of March 18 stipulated: "that a special committee be appointed to examine all expenditure of public monies for national defence and all commitments for expenditure for national defence since April 1st, 1958 as reported in Public Accounts", without mention of any particular department.

Messrs. Pearkes, Golden and Miller were questioned.

And the consideration of the Expenditures of the Department of National Defence for the fiscal year 1958-59 still continuing, it was adjourned until the next sitting.

At 10.55 o'clock a.m. the Committee adjourned to meet again at 9.30 o'clock a.m. Wednesday, May 25th, 1960.

Antoine Chassé,  
*Clerk of the Committee.*

NOTE: The underlines above are added to illustrate the basis of the chairman's ruling.



## EVIDENCE

FRIDAY, May 20, 1960.  
9.30 a.m.

The CHAIRMAN: We have a quorum, gentlemen.

Mr. SMITH (*Calgary South*): In view of a press comment, Mr. Minister, I wonder if I might ask a question. The heading of this is "R.C.A.F. Grounding Combat Forces Pearkes Hints". I have read the evidence and I was not able to come to the same conclusion as a result of the evidence. Having made one brief comment to the press, I thought you might like to make one to the committee as well in respect of this Canadian press dispatch.

Mr. LAMBERT: Mr. Chairman, I do not have it with me but it also appeared in the French press in perhaps a little worse light—more definite.

Mr. SMITH (*Calgary South*): The implication is that there is no more need for any flying air force. I do not think this was the impression left by the minister and I thought he might like to make a statement to clarify this.

Hon. G. R. PEARKES (*Minister of National Defence*): I think this is in reference to the partnership which we have with the United States, in respect of which I indicated that there were, for the air defence of the continent, at least three elements—a warning element, interceptor element and ground to air missile element. I said it was not necessary for any one partner to take part in each of those three elements.

I did not say that one partner could not play a part. Somebody asked the question about the necessity of interceptors being retained in the Canadian air defence command. That was my comment. I also said that no decision had been taken in 1958, nor at the present time, to replace the CF-100 with any other aircraft. Of course, I was not referring to the other commands in any way; there is the air division over in Europe; there is the air transport command which is being increased as I will show when we come to a discussion of the estimates this year; the search and rescue is being provided with new aircraft and there are a great many air activities. Does that answer your question?

Mr. SMITH (*Calgary South*): As I understood it; but, categorically there is no intention, I gather, to reduce the present fighter strength of our home defence force.

Mr. PEARKES: We are really discussing the expenditures of 1958-59.

The CHAIRMAN: We will come to that.

Mr. PEARKES: There were no plans or intentions in 1958-59 for the reduction of any aircraft then.

Mr. BALDWIN: On a question which I suppose would be privileged, at the last meeting I asked a question tending to show that as far back as 1955 the government of the day had grave doubts about the wisdom of proceeding with this program without some arrangement with the United States. That question was attributed to Mr. Forgie. I am sure he would be glad to disown that. This is on page 108.

The CHAIRMAN: Which line?

Mr. BALDWIN: About half way down the page. I asked a question, then you intervened, and then Mr. Forgie is shown as asking the question which I asked.

The CHAIRMAN: That will be corrected.

Gentlemen, you will recall that Mr. Winch asked this question:

While the minister is on this phase, would he give us what was the contractual basis or understanding with A.V. Roe on the development of the Arrow?

Then he said:

Would we be permitted, under our terms of reference, to obtain that information, as it comes under defence production? It certainly deals with the whole question of the Arrow.

You will recall, Mr. Winch, that I suggested I would like to talk it over with the speaker of the house. The clerk, Mr. Raymond, feels that the question is in order, particularly if you read our order of reference at the beginning where it said that a special committee be appointed to examine all expenditures of public money for national defence—and national defence is with a small “n” and a small “d”. He considers, as I am sure the whole committee will agree, that that does cover defence production as well.

Mr. Winch, I have invited Mr. Golden, deputy minister of defence production, to be here this morning. He is on the clerk’s left. Would you like to put the question to him again.

Mr. WINCH: The question is, what was the contractual basis between your department and A. V. Roe on the work proceeding on the development of the CF-105, and what was the understanding as to the procedure to be followed in the event of any reduction in the development program or its total cessation?

Mr. D. A. GOLDEN, (*Deputy Minister, Department of Defence Production*): There were a large number of contracts with the company, all of which were made subject to Department of Defence Production general conditions DDP-26B. Section 25 of this lays down the procedures to be followed on termination. That section reads as follows:

## 25. Termination

(1) Notwithstanding anything in the contract contained the minister may, by giving notice to the contractor, terminate the contract as regards all or any part or parts of the work not theretofore completed. Upon such notice being given, the contractor shall cease work (including the manufacturing and procuring of materials for the fulfillment of the contract) in accordance with and to the extent specified in such notice but shall proceed with all reasonable speed to complete such part or parts (if any) of the work as are by the terms of such notice to be completed and shall also proceed with all reasonable speed to complete up to such time or stage as may be specified in the notice any part or parts of the work as required by such notice. Furthermore, the minister may, at any time or from time to time give one or more additional notices with respect to any or all parts of the work which remain to be completed after the giving of any previous notice or notices.

(2) In the event of any notice being given under the provisions of this section, and subject as hereinafter provided;

- (a) All work completed by the contractor hereunder before the giving of such notice, and all work completed thereafter pursuant to such notice, shall be paid for (subject to inspection and acceptance by Her Majesty) in accordance with the terms hereof;
- (b) In respect of work not completed hereunder before the giving of such notice, and not completed thereafter pursuant to such notice, Her Majesty shall pay the contractor’s costs thereof as determined



under the provisions hereof, and in addition an amount representing a fair and reasonable profit in respect of work done thereon;

- (c) Subject as provided in para (d) of this subsection 2, if the contract shall have specifically authorized or if the minister shall have specifically approved the making of capital expenditures by the contractor to enable it to carry out the contract, the contractor shall be entitled to be reimbursed the amount of such capital expenditures so authorized or approved (and actually made or incurred) to the extent that the same (less any depreciation in respect thereof already taken into account in determining cost in accordance with the provisions of the contract) were reasonably and properly incurred by the contractor in respect of and are properly apportionable to the performance of the contract;
- (d) If the contract is exclusively a contract for the making of capital expenditures in respect of additional equipment or plant additions, the foregoing paragraph (a) to (c) inclusive of this sub-section (2) shall not apply but Her Majesty shall pay, or reimburse the contractor for the reasonable and proper cost to the contractor (not previously paid by Her Majesty, of
  - (i) all additional equipment which prior to the giving of the termination notice shall have been purchased, acquired or manufactured by the contractor, or contracted for and for which the contractor is obligated to make payments; and
  - (ii) all additional equipment in process of manufacture by the contractor as at the date of the giving of such notice and all work in connection with the construction of the plant addition up to the said date, including the cost of materials and parts contracted for by the contractor for the purposes of such manufacture or construction and for which the contractor is obligated to make payment.

(3) Notwithstanding the provisions of sub-sections (1) and (2) the amounts which the contractor shall be entitled to be reimbursed in the event of the giving of a termination notice under this section 25 shall include subject as hereinafter provided, the costs of the contractor of and incidental to the cancellation of obligations incurred by the contractor pursuant to the termination notice, the cost of preparing the necessary accounts and statements with respect to the work performed to the effective date of such termination and commitments made by the contractor with respect to the terminated portions of the work, wages which the contractor is obligated under any laws or regulations for the time being in force, to pay to employees whose services are no longer required by reason of such termination, the costs of and incidental to the taking of an inventory of materials, components, work-in-process and finished work on hand at the effective date of the termination and other costs and expenses of and incidental to the termination in whole or in part, of operations under the contract; provided always that payment and reimbursement under the provisions of this sub-section shall be made only to the extent that is established to the satisfaction of the minister that the costs and expenses aforesaid were actually incurred by the contractor and that the same are reasonable and are properly attributable to the termination of the work or the part thereof so terminated.

(4) In the procuring of materials and parts required for the performance of the contract and in the sub-letting of any work hereunder, the contractor, unless otherwise authorized by the minister shall procure or sublet on terms that will enable the contractor to terminate any

contracts entered into by the contractor upon the same conditions and terms as those provided for in this section in respect of the termination of the contract by the minister and the giving of a notice or notices as aforesaid and upon the same conditions and terms in respect of reimbursement and profit as those contained in this section; and in the event of the termination of the contract as herein provided, as regards all or any part of the work, the contractor shall cooperate with Her Majesty and the minister and do everything reasonably within its powers at all times to minimize and reduce the amount of Her Majesty's obligations under the provisions of this section.

(5) In case of disagreement as to the amount which the contractor is entitled to be reimbursed, the matter shall be referred to the Exchequer Court.

(6) Upon reimbursement being made the contractor as herein provided, titled to the materials, parts, plant, equipment and work-in-process in respect of which such reimbursement is made shall pass to and vest in Her Majesty (the contractor hereby agreeing to execute and deliver all requisite instruments by way of further assurance) and such materials, parts, plant, equipment and work-in-process shall be delivered to the order of the minister, but the materials thus taken over will in no case be in excess of what would have been required for performing the contract in full if no notice has been given under the provisions hereof.

(7) If it is established to the satisfaction of the minister by the contractor that by reason of any action taken by the minister under the provisions of this section exceptional hardship has resulted to the contractor, then the minister may, notwithstanding any other provisions of this section, in his absolute discretion grant such allowance (not to include in any case, however, any allowance or compensation for loss of profit), to the contractor as, in the option of the minister, is warranted by the circumstances.

(8) The contractor shall have no claim for damages, compensation, loss of profit, allowance or otherwise by reason of or directly or indirectly arising out of any action taken or notice given by the minister under or pursuant to the provisions of this section except as and to the extent in this section expressly provided.

(9) The right of termination and of giving notice hereinbefore provided for shall be in addition to and not in substitution for any other right possessed by Her Majesty and the minister.

Mr. WINCH: Thank you very much. May I ask two questions, Mr. Chairman?

The CHAIRMAN: By all means.

Mr. WINCH: What is the meaning, and what was the decision as to what was a fair and reasonable profit, and where in there was provision made, or how was provision made for termination pay to employees in the event of cancellation?

Mr. GOLDEN: With respect to the second part of your question, sir, the severance pay: there was severance pay and supplementary unemployment benefits paid to the employees of Avro. The hourly-rated and weekly-paid personnel were paid one week's pay, if they had less than one year's service; two week's pay, if they had more than one year's service; plus, for each week in which an ex-employee is unemployed during the first two years following his release, he is entitled to receive \$10 per week, if in receipt of unemployment

insurance benefits; and \$15 per week, if he is not entitled to such benefits; the maximum payment to any one person being \$260. For non-supervisory, monthly-paid personnel, one month's salary was paid, regardless of service.

With respect to profit, the profit payable was 5 per cent up to termination, and no profit on costs incurred after termination.

The CHAIRMAN: Are there any further questions?

Mr. HELLYER: In any of the contracts referred to, were there any provisions that an editorial comment, press clippings, or political speeches should be read as addendum to the contracts?

Mr. GOLDEN: I am not sure that I understand the question.

Mr. CHAMBERS: Mr. Chairman, I do not think that is a proper question to put to the deputy minister.

The CHAIRMAN: Would you repeat your question.

Mr. HELLYER: Yes. In any of the contracts, were there any provisions that the company had a duty to look to press clippings, editorial comment, or political speeches, as being read as addendum to the contracts?

Mr. GOLDEN: There were no such provisions.

Mr. HELLYER: Then the company should not be expected to interpret their contracts in any other way than in accordance with the provisions thereof?

Mr. GOLDEN: Is that a statement, or a question?

Mr. HELLYER: It is a question.

Mr. GOLDEN: I could not say what the company was expected to do, Mr. Hellyer.

The CHAIRMAN: I would say, Mr. Hellyer, that is a—

Mr. HELLYER: This is an important question. The company had a contract; it was under a contractual obligation, and, according to the contract, is it true that the only notice which could be given to alter the provisions of the contracts was a notice from the minister?

Mr. GOLDEN: With respect to termination, the provisions which I have read from DDP-26B prevail.

Mr. HELLYER: When was the first notice of termination or other alteration of the then existing contract given, from the period of September, 1958, until February, 1959?

Mr. GOLDEN: The notice of termination was February 20, 1959.

Mr. HELLYER: There was no notice of any kind given the company which would alter this contract in any way previous to that time, as far back as September of 1958?

Mr. GOLDEN: No notice is called for under DDP-26B; that is correct.

Mr. HELLYER: No contractual notice?

Mr. GOLDEN: No notice is referred to in DDP-26B; that is correct.

Mr. CHAMBERS: May I ask one small question, Mr. Chairman?

The CHAIRMAN: Go ahead.

Mr. CHAMBERS: When you gave the information relative to the termination pay of Avro, did the same apply to those companies that were working under subcontract from Avro?

Mr. GOLDEN: I cannot answer that in every detail; but in general the payments conform to the labour agreements in force as of the time of termination.

The CHAIRMAN: With each sub-contractor, Mr. Golden?

Mr. GOLDEN: With the sub-contractors, yes.



Mr. HELLYER: To refresh my memory, when the telegram suspending operations was forwarded, it said work should cease forthwith; is that right?

Mr. GOLDEN: I have not got the telegram in front of me. Perhaps I should refresh my memory, too, and look at the telegram.

The CHAIRMAN: Well, would you like to comment on it, what you feel is in it; or would you rather have it?

Mr. GOLDEN: My recollection is that those are the correct words. But I do not have the telegram in front of me. It has been filed.

The CHAIRMAN: Is that sufficient, Mr. Hellyer?

Mr. HELLYER: Yes.

The CHAIRMAN: Is there any further questioning of Mr. Golden?

Mr. CARTER: There was one question, Mr. Chairman. That was a long document that you read out there.

Mr. CHAMBERS: Do you want it read again?

Mr. CARTER: The thing I did not quite get was what the provision was for notice. Was the provision that notice had to be given of so many months, or weeks?

Mr. GOLDEN: No, it merely provides that the contract may be terminated at any time.

Mr. CARTER: At any time?

Mr. GOLDEN: At any time.

Mr. CARTER: Without any previous warning?

Mr. GOLDEN: That is right.

The CHAIRMAN: At the close of Wednesday's meeting, Mr. Forgie had a question. Have you any idea, Mr. Hellyer, or Mr. Carter, what Mr. Forgie wished to question on at that time? I closed the meeting by saying:

May we leave it at that point. Mr. Forgie, you will start questioning on Friday morning—

Mr. HELLYER: Mr. Forgie was unable to be here this morning.

The CHAIRMAN: Yes; but I wondered if you knew what his questioning would be.

Mr. HELLYER: I do not know.

The CHAIRMAN: Then we will proceed. We are still on aircraft and engines. Are there any further questions?

Mr. HELLYER: I have a question, if no one else has. Mr. Minister, during the period the Avro Arrow cancellation was under consideration, and which was in fact effected, a number of senior military advisers made public statements to the effect that manned interceptors would be required as far ahead, as they could determine—at least through the greater part of the 1960's.

Statements along this line were made by General Partridge, Air Marshal Slemon, General Kuter, General Thomas White, General Pearkes, General Taylor, General Twining, and others.

The CHAIRMAN: What is your question?

Mr. HELLYER: The question is: can the minister give the committee any public statement of any senior military person during the same period in which the contrary opinion was expressed?

Mr. PEARKES: No, I do not know of any serving officer of either the army or the air force who made a public statement to the contrary effect. That is, any Canadian serving officer. I cannot say anything about the American serving officers.



Mr. HELLYER: In view of that, Mr. Chairman, and in view of the minister's statement on Wednesday that the government asked the air force to find a cheaper alternative to the Avro Arrow, presumably on the basis that an interceptor was still required, why, in the minister's opinion, has it not been possible from September 1958 until May, 1960, to come to some decision in this matter?

The CHAIRMAN: We can consider it up until the end of 1959, Mr. Minister. Between September, 1958 and the end of 1959 is as far as we are working today.

Mr. PEARKES: Up to the end of 1959 no suitable aircraft was readily available. There was a considerable difference—or there were differences between the American aircraft at that time and the Canadian development of aircraft at that time. The main difference was geographical. Canadian air bases were relatively close to the mid-Canada line; therefore, it was necessary for an aircraft to be able to rise quickly from the base, in order to engage a bomber between the time that it came over the mid-Canada line and air stations. Therefore, it had to have supersonic speed from, really, the start out.

Secondly, the geographical condition of sparsely populated territory, with few air strips, required at least a two-seater aircraft, so that there would be control from the crew; whereas the Americans, because they had more warning, because their air bases were further south than ours, and because they had many airfields in their more thickly populated country, could rely on an aircraft which would start more slowly and then gain supersonic speed, in order to engage the hostile aircraft. And they could rely on one engine, as opposed to two, because there was not the risk of having a crash in more isolated parts.

We, therefore, had not, in 1958-59, been able to decide by then on a suitable aircraft to replace the CF-105, although a number of designs of proven value were being investigated at that time.

Mr. HELLYER: Was the fact that there was no suitable alternative available not taken into consideration before the cancellation was made?

The CHAIRMAN: I think the minister has already answered that about three times.

Mr. WINCH: May I ask a question?

Mr. HELLYER: I would like the minister's opinion on this, if we could have it.

Mr. PEARKES: The capabilities of existing aircraft in 1958-59 were known. The Arrow was not expected to come into operation until the end of 1961 or the beginning of 1962. There were those years in between, 1958, 1959, 1960, 1961 and 1962, in which there was time to look 'round and see whether a suitable aircraft would be available within that period.

There were a number of modifications being made to existing United States aircraft, and therefore the investigation was carried out.

The CHAIRMAN: Mr. Smith, is your question a supplementary one?

Mr. SMITH (*Calgary South*): It is.

Mr. Minister, I wonder, perhaps, if we could first establish the approximate time which your intelligence indicated to you that the threat of a manned bomber had decreased? I believe you made, during this period of which we are speaking, certain statements, indicating that this threat had been reduced.

Mr. PEARKES: This is a gradual period. This is a gradual forming of opinions. There were a number of indications. There was Mr. Khrushchev's statement at one time—and I believe it was the first statement to the effect that the manned bomber was out of date. I believe it was made somewhere around the beginning of 1958.

Mr. SMITH (*Calgary South*): During this period, Mr. Minister, what was the effective strength of our squadrons based in Canada—and I am speaking

of both Sabres and CF-100's? What was the operational strength during this period of the CF-100 and Sabres?

Mr. PEARKES: There were 9 squadrons at that time, and I think they had 18 aircraft each.

Mr. SMITH (*Calgary South*): Keeping in mind then the time of which we are speaking, had you not said in the house, and have you not said before the committee which you appeared before, that you considered at that time that these aircraft—Sabres and CF-100's—were adequate to meet the then known manned bomber forces of a potential aggressor?

Mr. PEARKES: It was considered the CF-100 would be capable of meeting the threat from whatever bombers the Russians had, until it could be replaced, as I have said, somewhere about 1961 or 1962. It was thought the CF-105 might be available by the end of 1958. That was when it was first conceived. However, it soon became obvious it would not be ready by that time, and reliance was placed on the CF-100 to meet any threat up to the time that the CF-105 would become available.

Mr. SMITH (*Calgary South*): You were asked by Mr. Hellyer why action was not taken to replace the CF-105 after the cancellation of contracts. The answer, then, I assume, is a combination of three factors: first, that you would not have the aircraft by 1961; secondly, the expense factor; and third, you considered that you were, at least, at that time, adequately equipped to meet the requirements for your defence.

Mr. PEARKES: It was considered during 1958-59 that Canadian interceptors were adequate to meet the bomber threat, when it was taken into consideration that we had made an agreement in 1957 for the mutual defence of this country, and could make plans with the United States forces for their intimate cooperation.

You will recall that NORAD was signed in 1957, and the fact that plans for the employment of United States air forces over Canada could be made in advance, if there was a threatening attack which effected our country.

Mr. SMITH (*Calgary South*): You were then in a position where you had cancelled the 105, and you considered at that time you were adequately equipped. You were given intelligence information, which suggested there would be a reduction in the threat of the manned bomber, and you have stated you did not consider there was another American aircraft that was available, or would be available for replacement and, I assume, Mr. Minister, that you did, with your staff, survey the American availability at that time?

Mr. PEARKES: Oh, very definitely.

Mr. SMITH (*Calgary South*): So, as far as the period under consideration is concerned, you took what you considered was every precaution.

Mr. WINCH: In view of the minister's statement made a few moments ago, on the question of replacement, it was felt there was not anything in the United States that would meet the requirements of Canada because, in this country, we required an interceptor plane that would have a very rapid take-off, because of the short warning.

Would I be right in assuming that the United Kingdom would be in a somewhat similar position as Canada, in that they would not have very much in the way of warning and would require an interceptor that would have the rapid takeoff and the achievement of supersonic speed?

If that contention is correct, were there no types in the United Kingdom that would meet the replacement requirements of Canada?

Mr. PEARKES: In answer to your first question; the conditions in the United Kingdom are even more acute than they are in Canada, and the type of fighter which was required in the R.A.F. required even greater ability to go into

action quickly than what would be required in Canada. Again, the conditions in the United Kingdom are such that it is a thickly populated country, and there are many airfields available. In the main, the interceptor of the R.A.F. is a one manned aircraft.

Mr. WINCH: Could you give a little more detail on that? Would you go into greater detail? If, as you say, the situation in the United Kingdom is more acute, in that they have to get off the ground and into action so much faster, irrespective of whether it is a thickly populated area, where is the difference then? If they did have such planes in the United Kingdom, were they not adaptable to Canada?

Mr. PEARKES: I think there are two factors there. First, the R.A.F. aircraft did not have the range which we would require here in this continent.

Mr. WINCH: Are you in a position to tell us what the range was?

Mr. PEARKES: No. The ranges of aircraft are classified information, and I am not in a position to give the detailed range of United Kingdom aircraft. I can say, in general terms, that that is correct. And then, another point was that we were at that time considering the control system which was to be brought in, and the United Kingdom do not have the same ground environment system which is being introduced into our operations here.

The CHAIRMAN: I think what you really wanted to know, Mr. Winch, to the n-th degree, is this: did they take a good "look see" at the availability of planes in the United Kingdom at that time?

Mr. PEARKES: I can assure you most emphatically that we did, because we would have liked to have purchased British planes, if the British plane could meet our conditions and would be available.

Mr. FAIRFIELD: During the course of your considerations in 1958-59, could the minister answer this question. Was the particular policy of NORAD to protect the deterrent bases?

Mr. PEARKES: Oh, definitely. Protection of the SAC bomber bases was one of the main considerations in connection with the air defence of the North American continent. Do not let me give a false impression—there was also the thought of protecting the populated centres.

To answer you very definitely, the protection of the SAC bomber bases was an important factor in the air defence plans.

Mr. FAIRFIELD: So, the role of the CF-105 would not be of such a great interest then, in so far as the Americans were concerned in purchasing the 105? They had suitable planes in the field, and they felt they had suitable planes to protect their deterrent bases without going into the purchase of the 105?

Mr. PEARKES: Yes. They were not prepared to invest money in purchasing the 105, because they considered their type of plane was more suitable for their own particular requirements, and was more economical than the 105.

Mr. WINCH: They wanted the aggressor planes shot down over Canada and not over the United States, so the CF-105 would be useless to them for that purpose,

The CHAIRMAN: That is merely a statement.

Mr. Lambert, you are next.

Mr. LAMBERT: Following the signature at NORAD and its partnership implications with respect to the defence of North America, when it was seriously considered to cancel the Arrow, was the American government advised of this; and what was the reaction of the American government within the NORAD agreement?



Mr. PEARKES: The American government was advised that it might be necessary to cancel the Arrow. They were advised, in advance, that it might be necessary to cancel the Arrow, because of the reasons I have given. We were keeping them informed of our thinking, prior to the cancelling of the Arrow and, when the Arrow was cancelled, they were advised immediately. No approval or disapproval was ever sent to Canada from the American government.

Mr. LAMBERT: It is safe to assume that, as a result of this decision, the Americans considered it within the NORAD agreement that Canada could cancel the Arrow without any deleterious effect on NORAD?

Mr. PEARKES: Yes.

The CHAIRMAN: Will you proceed, Mr. Carter.

Mr. CARTER: Mr. Minister, on page 4 of your statement you state—and I am quoting

Mr. Khrushchev had declared that manned bombers were obsolete. Was that declaration by Mr. K. taken seriously, or was it questionable?

Mr. PEARKES: It was taken seriously. I believe he made that statement to the Supreme Soviet and, generally speaking, the statements that Mr. Khrushchev has made in Russia to the Soviet's representatives appear to have been correct. That is, over a long period, we have come to the conclusion that the statements made to us in—may I call it the Russian parliament, are correct statements?

The CHAIRMAN: Mr. Pearkes' statement on that is on page 89.

Mr. CARTER: Did subsequent events prove that statement to be correct?

Mr. PEARKES: As far as we can tell now, that statement has been repeated several times since, and I think I can say that there is no indication that the Russians are continuing to develop new types of bombers. Certainly they have not gone into the production of new types of bombers, and they are not, as far as we know, producing any more than just replacements for the existing bombers.

Mr. CARTER: Well, at the time that Mr. Khrushchev made that statement, did the intelligence reports available to us indicate that the Soviet Union did have supersonic bombers capable of bombing population centres in the United States?

Mr. PEARKES: I do not think I should be asked to give in an open meeting what intelligence revealed.

The CHAIRMAN: You are absolutely correct, Mr. Pearkes.

Mr. CARTER: Well, was there any knowledge that the Soviet Union did have supersonic bombers at that time?

The CHAIRMAN: That is the same question, Mr. Carter.

Mr. CARTER: The question is implied in the statement.

The CHAIRMAN: In whose statement? Mr. Khrushchev's or Mr. Pearkes'?

Mr. CARTER: No. I quote what the minister said at page 4 as follows:

During the same period there was no further evidence to show that the Soviet Union was in fact developing supersonic bombers or increasing the inventory of their long-range bomber forces.

Mr. PEARKES: That is what I have just said, and I will stand by that statement.

Mr. CARTER: There was no evidence that the Soviet Union had any supersonic bombers?

The CHAIRMAN: That question is out of order, as you know, Mr. Carter.



Mr. HELLYER: Mr. Chairman, in Mr. Smith's question a few minutes ago he used two words in respect to the Russian bomber inventory, and they were "decreased, and reduced". I wonder if the minister agrees in part with Mr. Smith's statement? Would the minister define what he means by "decreased, and reduced"?

Mr. PEARKES: The number of Russian bombers in their air force?

Mr. HELLYER: Yes.

Mr. PEARKES: Well, it does not appear that some of the older types are being replaced. Therefore there is a general decrease in the number of bombers which are available and which are in operation in the Russian air force.

Mr. HELLYER: But the total inventory of Russian bombers during 1958-59 was much less than the year before, was it not?

The CHAIRMAN: That again is a pretty hard question to comment on.

Mr. HELLYER: There is some confusion, and it has been caused through the use of words out of their usual meaning, because when "diminished threat" was used earlier it was taken to mean lesser threat than previously, and elsewhere it was taken to mean less than anticipated, which is something entirely different. So I think the minister should clarify it.

The CHAIRMAN: What is your question?

Mr. HELLYER: In using the words "diminished threat", does the minister mean that it was less than previously, or less than anticipated would have been the case at that time?

The CHAIRMAN: Did the minister say that the threats had diminished?

Mr. CHAMBERS: Surely if we are discussing 1958-59, we are not discussing aircraft which would not come into use until 1961 or 1962.

The CHAIRMAN: Therefore we cannot discuss it. I think the question is out of order.

Mr. CHAMBERS: In 1958-59 this aircraft would not have been available. So it is really a matter of what the threat would be in 1961-62.

The CHAIRMAN: I do not recall the minister ever making that statement. I suggest we wait until the evidence is printed.

Mr. HELLYER: In the house and elsewhere the minister made the statement that at the time of the Avro Arrow there was a diminished threat, and that it was one of the factors, namely, the diminishing threat from Russian bombers; but did he mean that the threat was less than previously or less than what was anticipated?

Mr. CARTER: I would like to return to the previous question which you ruled out of order, and to raise a point of order concerning it.

The CHAIRMAN: Very well.

Mr. CARTER: I want to read the minister's statement here.

The CHAIRMAN: Is that at page 89?

Mr. CARTER: At page 4.

The CHAIRMAN: Is that identified at page 89?

Mr. CARTER: Yes, and I shall read it.

The CHAIRMAN: Thank you.

Mr. CARTER: At page 89 the minister said:

Mr. Krushchev had declared that land bombers were obsolete. During the same period there was no further evidence.....

The word "further" surely indicates that there had been some evidence, otherwise there could not be further evidence.

The CHAIRMAN: That is a technicality. There might have been some inference or some thought that they might have an opinion, but the point is that it is classified; I mean the evidence that he did have at that time; and he said there was no further evidence.

The minister said it was classified at that time. That is why I ruled it out of order.

Mr. HELLYER: Last November General Kuter told the Canadian people that he would like to see the Canadian air defence squadrons re-equipped with supersonic planes. Last month in Colorado Springs he indicated that he had not changed his views since November.

Does the minister not feel that because when the Canadian government entered into a solemn agreement with the United States government in respect to the joint responsibility in air defence of the North American continent that Canada is obliged to fulfill its role, even though our participation is minor both from the standpoint of cost as well as that of contribution?

The CHAIRMAN: You are talking about 1958-59, are you?

Mr. HELLYER: The two are closely inter-related. On a point of order might it be decided whether we might conveniently proceed without having to confine our remarks to a specific time period, and whether we might proceed with the estimates and not to have this item held up.

The CHAIRMAN: That is a point of order.

Mr. SMITH (*Calgary South*): Earlier, on this very same point, I think you quite rightly and sensibly ruled it to be out of order. If we are attempting to make other comparisons which would have been very useful in many instances, that would be another matter. But I suggest we follow your ruling and return to the estimates, rather than to satisfy Mr. Hellyer.

Mr. HELLYER: It is not a case of satisfying me. I merely want to try to proceed in the most effective way with the business of this committee, and to have the most effective discussion and consideration of the important matters which have been referred to us. At the same time it is rather difficult, if not impossible, to extract factors which apply to a policy ending on a certain date, and those which apply at present and into the future, and particularly so now that we have reached the matter of aircraft. I think it would be more satisfactory to all the members of the committee if we proceeded with a discussion of current estimates, and left those items open which are as yet to be included in the accounts of 1958-59.

The CHAIRMAN: I was under the impression that we had been proceeding with great haste. We all agreed at the beginning of these deliberations and of this questioning that we would adopt this policy, and when the whole committee was in agreement with the Chair that this would be by far the best way to get through the 1958-59 expenditures. So I cannot see any reason to change our opinion right now.

Mr. SMITH (*Calgary South*): May I add that there is nothing to prevent any committee member, once we get to the estimates, from making a reference back to the subject matter under discussion.

Mr. HELLYER: If we may have that assurance, I think we would be satisfied.

The CHAIRMAN: I thought I had already assured you on that point, and that we could also refer back to 1959-60 at that time.

Mr. HELLYER: If you have no objection to our referring back, then all right.

The CHAIRMAN: No, not in the least.

Mr. SMITH (*Calgary South*): Mr. Minister, you have already stated in reply to a question which I asked, the three basic reasons why the CF-105

program was dropped. Roughly, from memory, they were: (a) the cost; (b) the decrease or decline in the manned bomber threat; and (c) I suggested to you a third as being the operational capabilities of the aircraft.

May I ask you if of the three reasons the cost factor assumed greater importance, because we were looking at about \$1 billion for the total initial undertaking?

Mr. PEARKES: Well, I was asked a similar question a couple of days ago, and I said they were all relevant factors.

Mr. SMITH (*Calgary South*): Could we talk for a moment about the operational capabilities? Where were these squadrons to be based, had they been utilized?

Mr. PEARKES: These squadrons in 1958-59 were to be based as they are today, that is to say, at North Bay, Uplands, St. Hubert, Bagotville, and Comox in British Columbia.

Mr. SMITH (*Calgary South*): Recognizing that we have quoted many times the range of the aircraft, was this considered by your advisors to have been adequate to have met any threat under those circumstances? I am thinking of the limited range of aircraft, and the area of territory that they had to cover, and was this not a factor in so far as the cancellation of the aircraft was concerned?

Mr. PEARKES: Very definitely.

Mr. SMITH (*Calgary South*): That is all.

Mr. HELLYER: Why would that consideration have changed so abruptly? If the air force considered the planes to have been adequate at the time, and if the aircraft met its own specifications, why did you think it would not have been able to do the job for which it was intended?

Mr. PEARKES: If you will recall, I stated at the first meeting that originally the idea had been to equip the auxiliary squadrons which were distributed all across Canada with this aircraft. Then for various reasons it was found that it was impractical to have the personnel of the auxiliary squadrons trained sufficiently to be able to operate this advance type of aircraft, so the role of the auxiliary squadrons was changed.

Indications were given that there would be a change somewhere about 1956. Therefore the numbers were cut down, and therefore the availability of this aircraft for the defence of large sections of Canada was not considered.

Mr. HELLYER: Mr. Minister, that may be so; but with the rather widespread dispersal you have mentioned, and which was considered at that time, would it not have been true that the aircraft would have been able to play a very valuable identification role over very wide areas?

Mr. PEARKES: It would have been able to carry out an identification role within the limits of the radius which I gave for supersonic speeds, somewhere about 407 miles, which was the radius, and that would refer to 407 miles from the stations that I have mentioned.

Mr. HELLYER: Obviously in an identification role ordinarily, with the threat you have described earlier, being in most cases sub-sonic, it would not have been necessary to go out and back supersonic; it would be possible to use the radius of action of the aircraft, which was 600 or 700 miles.

Mr. FAIRFIELD: Would they not have been capable of operation between the head of the lakes and the foothills of the rockies in any case?

Mr. PEARKES: That is true. Because we were not going to have enough aircraft to look after that very large part of Canada, that you have described, we went into the partnership with the United States. The United States would become responsible for the identification and interception of aircraft over that particular part of Canada even though we had had the CF-105 in operation.



Mr. HELLYER: I have a supplementary question. A great deal has been said about the range of this aircraft. From experience with other aircraft, would it not be fair to say that with redesign the subsequent models of the aircraft would have had their range and radius of action increased considerably?

Mr. PEARKES: There were no such plans, so far as I know, in 1958 to redesign the aircraft and increase the range over the range I gave you at the first meeting.

Mr. HELLYER: But this was not an unreasonable expectation with a new aircraft.

Mr. SMITH (*Calgary South*): It also follows that with redesign you lose your other capabilities.

Mr. CARTER: I would like the minister to explain a little more definitely just what is involved in the concept of mutual defence—NORAD? In NORAD is the primary objective to defend their SAC bases in the United States, or does it include the defence of air space over Canada.

Mr. PEARKES: In 1958, the defence of the SAC bomber bases was one of the purposes of the NORAD command.

Mr. CARTER: Does it involve any responsibility on the part of the United States for the defence of air space over Canada?

The CHAIRMAN: Did it at that time? Is that what you mean?

Mr. CARTER: Yes, and does it now?

Mr. PEARKES: The defence of Canadian centres of population, the defence of Canadian territory, the defence of Canadian air space, is all part of the general concept of the defence of the North American continent and is taken into consideration in all of the NORAD concepts.

Mr. CARTER: I am endeavouring to get it in terms of priorities.

Mr. PEARKES: In terms of priority?

Mr. CARTER: Yes.

Mr. PEARKES: The terms of priority may vary from time to time.

Mr. CARTER: In the transition stage when manned bombers were being phased out and push button missiles phased in were our United States partners satisfied that the CF-100 was adequate to the role which it would have to play?

The CHAIRMAN: They did not have anything to do with it at that time. We had the CF-100.

Mr. CARTER: But we were a partner with the United States.

Mr. PEARKES: I can say this. They were very pleased to find 9 squadrons of the R.C.A.F. were cooperating with the United States airforce in the defence of this continent.

Mr. CARTER: They were quite satisfied that the CF-100 was able to do the job?

The CHAIRMAN: That is right.

Mr. HELLYER: You said "That is right".

The CHAIRMAN: That is what the minister just said. All right, we will take that off the record.

Mr. CHAMBERS: Would security permit the minister to say at this time what his advisors felt would be the prime target in North America of any attack? In other words what would an enemy go for first on this continent?

Mr. PEARKES: Ever since NATO has been formed it has been the concept of the retaliatory forces—which have been referred to as the shield and the sword repeatedly—that is highly important that the retaliatory forces—at that time the SAC bomber bases in the United States—should be protected. I



cannot give in percentage form the order of priority or that sort of thing. I must insist that the protection of the SAC bases is an important element in the defence of the North American continent. The protection of the Canadian cities is also an element in the defence of North America.

Mr. CHAMBERS: My question was this: was it expected that the chief target of an enemy force would of necessity be SAC bases? In other words, they would have to get this first.

The CHAIRMAN: First, or one of the first?

Mr. PEARKES: It was anticipated that the enemy would direct his early attacks on this continent against the SAC bomber bases.

Mr. BALDWIN: Mr. Chairman, the minister has told us of the various strenuous efforts be made during the period in question to try to obtain some cooperation in connection with the Avro Arrow and alternatively to obtain a replacement after the program was cancelled. I think you said that you and your officials made very strenuous efforts in that regard.

Mr. PEARKES: Very definitely, efforts have been made to get other countries interested in the Avro Arrow; but for some of the reasons I explained—the cost factor and also the particular features of this aircraft—it was not a requirement in other countries such as the United Kingdom, and we were unsuccessful in getting any other country to indicate that they would purchase any of the Avro Arrows if the aircraft finally had been completed.

Mr. BALDWIN: I also think you told Mr. Smith of your efforts to secure a suitable replacement.

Mr. PEARKES: Efforts were made during 1958-59 to investigate the type of aircraft which was available in various countries to act as a replacement for the CF-100.

Mr. BALDWIN: Now, as a result of those labours and efforts on your part did you entertain a serious doubt as to the wisdom of a country like Canada designing, developing and constructing a program of the nature of the Arrow which was in part tailored to our particular requirements without obtaining some participation from our friends and allies having in mind the radical changes and the astronomical cost involved.

Mr. PEARKES: Being wise after the event, I think in 1958 I would have said it would have been highly desirable had it been possible to have arranged for the sale of this aircraft to other countries before the operation had started, or to have got other countries to share in the cost of the development; but that is being wise after the event. When this operation was first started in 1953 the government of the day took into consideration all the factors and decided there was justification then to go ahead with the operation. They had had the experience of the successful development of the CF-100, and they felt they were justified to go ahead with the development of the replacement for the CF-100. I do not think that one—and I will not attempt to do it—years after that decision was taken should be critical of the decision based on experience after that.

Mr. FAIRFIELD: I have a supplementary question. Was one of the points which prospective purchasers did not like about this plane, other than the operation factors, the high cost of the plane?

Mr. PEARKES: Very definitely.

Mr. FAIRFIELD: They did not like even to consider the tremendous price?

Mr. PEARKES: The price was in excess of the price they were paying for aircraft which they thought could do the job they wanted.

The CHAIRMAN: Are there any further questions on this item, gentlemen?

Mr. HELLYER: Does the minister think—again hindsight being based on more information than foresight—that if the government had decided to go ahead with the Avro Arrow that at the present time we would be in a position to exchange that aircraft with the United States for other defence equipment?

The CHAIRMAN: We are getting back into today; but go ahead.

Mr. PEARKES: In 1958, there was no prospect of getting any other country interested in purchasing the Avro Arrow.

Mr. HELLYER: That was true at that time, but it might not have been true had we gone ahead now, because of changed circumstances.

The CHAIRMAN: Again we are into 1961.

Is the item carried?

Mr. HELLYER: No, Mr. Chairman.

I think we did ask for some additional information on a breakdown of these costs.

The company agreed to the minister's offer to produce 100 production models at a cost of 3.45, was it, million dollars, a copy.

Mr. CHAMBERS: Less development.

The CHAIRMAN: Was that not in your answer you received yesterday?

Mr. HELLYER: I think it was in the minister's statement.

What I would like the minister to provide, if he would do so, in order that we might have the information, is the breakdown of the difference between that 3.45 and the totals he gave us on a per copy basis if we had gone into volume production and had it available for sale over and beyond our own requirements.

Mr. MILLER: I might answer this question.

The offer of the company was \$3,750,000 per copy. Now, the term they use to associate with that, is "fly away". That is, if they were allowed to produce 100 airplanes they would sell all those airplanes as a bare airplane, for that amount of money. So, if on the face of it, you took 100 of them, you would multiply that figure by 100. What they did not include in that was the continuation of the development of the airplane to the point where it could be put into production as a fully free operational airplane. That figure was \$295,000,000. This was the estimate made at the time. If you add it up, that automatically adds another \$3,000,000 to the price. That was a continuing development of that aircraft from configuration, which they were quoting on at the time. That was estimated to be that amount. In addition, you had to have the spare support and ground handling equipment, which was of the order of \$100,000,000. Then, the procurement of the necessary weapons add another \$50,000,000. So, the figure to which the minister has referred, in the amount of 7.8 million dollars per copy, is the average cost of the 100 airplanes, starting at the basic cost of \$3,750,000. And working it up, with all the appendant factors, it comes out to this figure. That would be for the first 100 copies, on the basis of your figures, at volume production if proceeded with.

Mr. HELLYER: You mean that for the 100 over and above the 100, the prices would have diminished down to something of the order of \$4,000,000 to \$5,000,000, or less, depending on the extent of the volume.

Mr. MILLER: This was a definitive offer, based on 100?

Mr. HELLYER: The minister quoted a figure the other day based on 167 production aircraft and the 37 pre-production.

Mr. MILLER: There were 169 aircraft involved. That was the original replacement airplane for airplane of the nine squadrons. There were 169 production airplanes plus 40, I think it was, pre-production.

Mr. HELLYER: What would be the per unit cost approximately, for that total?

Mr. MILLER: You would divide it by roughly 200.

The costs that were given were the "all-in" costs. This figure of \$3,750,000 ignored the cost that had been made to date. "To date" being September of 1958.

Mr. HELLYER: To put this thing in somewhat more proportion, what would be the cost per copy of the first group of CL-28's, for instance, which have no armament or fire control systems, or anything of that nature? I know it is a difficult comparison.

Mr. SMITH (*Calgary South*): It is not a comparison.

The CHAIRMAN: An elephant and a mouse.

Mr. HELLYER: Was the figure of \$140,000,000 given for the first 25 copies?

The CHAIRMAN: The minister is looking up that information now.

Mr. SMITH (*Calgary South*): I would be interested to know how this is relevant, Mr. Chairman. These are totally different airplanes and serve different roles.

The CHAIRMAN: Yes; I think the minister mentioned it at one other time.

Mr. PEARKES: The original estimate was based on a requirement of 600 aircraft, whereas the final estimate was concerned with 100 aircraft only. This reduction in unit cost is supported by actual experience during production of the CF-100 aircraft, where costs were reduced over the period of the production run by some 50 per cent. 680 CF-100 aircrafts were produced. The production cost for the first batch of 70 averaged \$1,089,000 per aircraft.

Mr. HELLYER: This was not the aircraft to which I was referring.

Mr. PEARKES: No, but this is indicative of the change, as production goes along. In connection with the last batch of 208, the average production costs were reduced to \$535,000 per aircraft.

The CHAIRMAN: About half?

Mr. HELLYER: About half the cost of the original group.

Mr. PEARKES: Yes.

Mr. HELLYER: I wonder if the minister could tell us why, if the department was seriously considering the cancellation of this aircraft in September 1958, it authorized the company, in November of that year, to initiate the installation of the Hughes fire control system.

Mr. PEARKES: Why it authorized?

The CHAIRMAN: The inclusion of the fire control system in 1958.

Would you repeat your question, Mr. Hellyer.

Mr. HELLYER: If the department felt that the cancellation of the aircraft was imminent, why would it proceed in November 1958, to introduce the Hughes fire control system?

Mr. PEARKES: You will recall that the Prime Minister, sitting in the House of Commons, gave the reasons as to why we continued on with the production through the winter of 1958. There was an international situation, which was critical at that time, in the far east. It was considered advisable to keep the personnel of Avro available so that, if it had been necessary—if the situation had deteriorated, those personnel were still there. And, in the meantime, tests were being carried out to see whether it was practical to introduce, at not too great an expense, this alternative weapon and fire control system into the Arrow.

The CHAIRMAN: Would you mind, Mr. Hellyer, if we left this item open?

Mr. HELLYER: Mr. Chairman, I have only one or two more questions.

I have heard that explanation given before, Mr. Minister, but I wondered if the situation in Berlin, in 1959, was not as grave as the one in the middle east the previous fall?



Did the minister ever seriously attempt to secure United States participation in the program to the extent of supplying the fire control system, United States manufactured equipment, and flight test services?

Mr. PEARKES: The United States manufacturers would have been pleased to have supplied any elements of the CF-100—

Mr. MILLER: CF-100.

Mr. PEARKES: —but this was being developed in Canada.

Mr. HELLYER: That was not my question. The question was this. Did the minister attempt to determine if the United States air force would participate in this after the NORAD agreement was signed, and about this time, I think, in September, 1959.

Mr. PEARKES: The United States, at no time, would consider the purchase or make any contribution towards the development of this aircraft. They were quite prepared to sell us any parts that we needed—and, of course, some parts had to be obtained from the United States—but there was no indication at any time that they would make a financial or other contribution.

Mr. HELLYER: My final question for today. The United States did agree to pay that  $\frac{2}{3}$  of the cost of most of the things we were contributing from that day on to NORAD—gap fillers, the SAGE system, and the Bomarcs. Why were those things treated differently than the interceptors, which were all part of the same defence system?

Mr. PEARKES: Of course, the United States had agreed years before to that sharing of costs on some of the warning lines, but they had never entered into any agreement for the cost sharing of the Arrow.

Mr. SMITH (*Calgary South*): I think Mr. Hellyer should be called to discuss why they were not more successful in selling this aircraft.

The CHAIRMAN: Gentlemen do you want to leave this open, Mr. Hellyer?

Mr. HELLYER: I could sell it now. Yes, Mr. Chairman, it being 11 o'clock.

The CHAIRMAN: We ask each one of you to supply a list of names of people you would like called, if we do call in anyone. Would you have them in so I can present them to the steering committee the first of next week?

The next meeting will be on next Wednesday at 9.30, in this room.

—The committee adjourned.



## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

WEDNESDAY, May 25, 1960.

(7)

The Special Committee on Defence Expenditures met at 9.32 a.m., with Mr. G. E. Halpenny, the Chairman, presiding.

*Members present:* Messrs. Baldwin, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Lambert, Macdonald (*Kings*), Roberge, Smith (*Calgary South*), Thompson, Winch—12.

*In attendance:* Honourable George R. Pearkes, Minister of National Defence; Mr. F. R. Miller, Deputy Minister; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Air Commodore Desbarats, Chief of Finance, Royal Canadian Air Force; Dr. G. S. Field, Chief Scientist, Defence Research Board.

The Committee resumed from Friday, May 20th, the consideration of the Expenditures of the Department of National Defence for the fiscal year 1958-59.

The Committee having reached the Defence Research Board Expenditures, Dr. Field made a short statement respecting operations of the Defence Research Board.

The Committee decided to withhold questioning of Dr. Field until the next meeting.

The Committee adjourned at 10.50 a.m. until Friday, May 27th at 9.30 a.m.

Clyde Lyons,  
*Acting Clerk of the Committee.*



## EVIDENCE

WEDNESDAY, May 25, 1960.

9:30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. We have our old friend, Mr. Lyons, with us as Clerk of the Committee.

As we closed off No. 5, I think Mr. Hellyer was questioning the minister and we left open the item on aircraft and engines. Do you wish to continue now, Mr. Hellyer?

Mr. HELLYER: Yes, Mr. Chairman, I have a few more questions.

Mr. Minister, on page 127 of the evidence in reply to a question asked by Mr. Smith, who asked you at what time the intelligence in respect to the Russian bombers had changed, you replied as follows:

Mr. PEARKES: This is a gradual period. There is a gradual forming of opinions. There were a number of indications. There was Mr. Khrushchev's statement at one time—and I believe it was the first statement to the effect that the manned bomber was out of date. I believe it was made somewhere around the beginning of 1958.

Is that correct?

The CHAIRMAN: You refer to page 127, the second last paragraph?

Mr. HELLYER: At the bottom of the page.

The CHAIRMAN: The second last paragraph; very good.

Hon. G. R. PEARKES (*Minister of National Defence*): You ask me if my statement was correct?

Mr. HELLYER: Yes.

Mr. PEARKES: To the best of my knowledge; you will recall that the first sputnik was launched in the fall of 1957, and I think it was shortly after that that Mr. Khrushchev made his first statement. And, of course, he has repeated it subsequently.

Mr. HELLYER: Mr. Minister, you are reported as having said, in the *Calgary Herald* of January 18, 1958—

Mr. SMITH (*Calgary South*): A most reliable newspaper!

Mr. PEARKES: I shall reserve my judgement.

The CHAIRMAN: I think we have it on the record that it is a reliable paper.

Mr. SMITH (*Calgary South*): You bet!

Mr. HELLYER: I quote the Minister of National Defence as reported in the *Calgary Herald* of January 18, 1958 as follows:

I do not share the opinion that the Arrow will be obsolete before it is operational. When Russia stops building bombers it will be time for us to start thinking of some other defence.

That was on January 18, 1958. Does the minister see any conflict between the two opinions he has expressed in this matter?

Mr. PEARKES: Would you mind repeating it?

Mr. HELLYER: The clipping reads as follows:

I do not share the opinion that the Arrow will be obsolete before it is operational. When Russia stops building bombers it will be time for us to start thinking of some other defence.

That is a direct quotation.

Mr. PEARKES: Well, I think that is about correct. It reflects the opinion that I held in 1958.

Mr. HELLYER: And on September 27, 1958—

Mr. SMITH (*Calgary South*): May I ask if there is anything more to that quotation?

Mr. HELLYER: I do not have the whole paper here.

Mr. PEARKES: The last part of that quotation is certainly correct. I thought at that time that when the Russians stopped building bombers it would be time to think of some other form of defence.

Mr. BALDWIN: I have a question which is supplementary to that point: referring to the minister's statement, is it not a fact that you said there were a number of indications that Mr. Khrushchev's statement made some time around the beginning of 1958—it was Mr. Khrushchev's statement made at the beginning of 1958 that is generally referred to as being one of the possible indications?

Mr. PEARKES: Yes, and the launching of the sputnik was another indication. These things do not happen just at a fixed point. There is generally a trend, and you get information about what is going on from published sources and statements which have been made. I do not think it is possible to say that at any one fixed date we suddenly woke up to the fact that the manned bomber was going out, or that the threat of the manned bomber was diminishing.

The collection of information has made it clear that the process is going on. Nor do I say that today the manned bomber is a threat which does not exist. If a war came tomorrow, there would definitely be a threat from Russian manned bombers. I believe they would use them if war came tomorrow.

Mr. HELLYER: Some months later, on September 27, 1958 the Hon. James H. Douglas, secretary of the United States air force, at the annual meeting of the air force association, is quoted as having said this:

I believe Soviet statements that a new long-range bomber has been flown. This development, of course, emphasizes the importance of our own advanced bomber programs and of our long range interceptor and air defence missile programs.

Would the minister indicate which of these two Soviet statements he feels should be given the greater importance from the standpoint of Russian intention?

The CHAIRMAN: You mean which of two Soviet statements?

Mr. HELLYER: Yes, one that the manned bomber was obsolete, and the other stating that a new long range bomber has been flown.

Mr. PEARKES: You mean back in 1958 when these statements were made, one would have to try to assess the value? There is no need in my assessing it now when it is two years afterwards. I do not think that is fair. If I did that, I would probably say that I should give less weight to the fact that the Russians—as Mr. Douglas has indicated—that the Russians are getting a new long range bomber, because I do not think they are.

Mr. FAIRFIELD: In the Russian statement do we only relate it in so far as policy is concerned?

Mr. PEARKES: No, we have to assess the value of the Russian statements.



Mr. FAIRFIELD: As to whether they are reliable or not?

Mr. PEARKES: It is one of the sources of information, and I know we have tried to assess how reliable they are.

Mr. HELLYER: My reason for raising the point is because of the weight the minister placed on the statement by Mr. Smith as being a factor, and one on which we could rely.

The CHAIRMAN: You mean on page 127?

Mr. HELLYER: Yes; it is quite evident that the Russians have made statements which are completely contradictory, and which would indicate that their reliability is under question.

Mr. SMITH (*Calgary South*): I wonder if the minister is aware whether it was Mr. Douglas who was responsible to some degree for the reduction of the United States fighter or interceptor squadrons; or, at least, for the reduction in the program for them?

Mr. PEARKES: I think Mr. Douglas at that time was the secretary for air.

Mr. SMITH (*Calgary South*): That is right.

Mr. PEARKES: And therefore he must have had a degree of responsibility for any action which was taken by the United States.

Mr. SMITH (*Calgary South*): So he, conceivably, was thinking in the same lines as you were, sir.

Mr. HELLYER: With respect to the range of this aircraft, on page 106 of the evidence the minister gives the supersonic combat radius of action as 354 nautical miles; 407 statute miles.

Then on the next page, 107, the subsonic combat radius of action as 506 nautical miles, or 582 statute miles. In *Hansard* of last year, at page 1281, speaking on this subject the minister is quoted as saying this:

There was some concern at that time about the range of the CF-105. We had been informed then that the ranges were 238 nautical miles flying supersonically and 347 nautical miles flying subsonically. Of course, obviously if you are going into an attack you would cruise as far as you could and only go into your supersonic speed at the last few minutes so you might say that the general operational range of the CF-105 at that time would have been about 300 miles including some period of operating supersonically and some period of operating subsonically.

I wonder if the minister would reconcile these two statements with respect to the range of the aircraft.

Mr. PEARKES: Yes. Various speed objectives were set at various times as the ultimate objective. The final figures that I gave to this committee were the final figures which were being used as the speed objective. They were based on the performance of the aircraft after it was developed.

Mr. HELLYER: And they were approximately 50 per cent greater than the ones used at the time the aircraft was cancelled?

The CHAIRMAN: You have the figures there, Mr. Hellyer.

Mr. HELLYER: Yes.

Mr. PEARKES: The figures I gave the committee—

Mr. HELLYER: 354, for instance, as against 238.

Mr. PEARKES: —are the ones that I believe were the correct figures for their ultimate speed, had the aircraft been fully developed.

The CHAIRMAN: Are there any further questions, Mr. Hellyer?

Mr. HELLYER: Yes, if no one else has any questions.

Mr. SMITH (*Calgary South*): I have one which is supplementary to this, if I might, Mr. Hellyer. Mr. Minister, we have dealt to some extent with the suggestion of possible modifications to the CF-105 during its short life. I wonder if you, sir, or any of your officials, can tell us whether there was any thought given to modifying it—and if so, to what extent.

None of us needs to be flight engineers to know that when you change any particular aspect of an aircraft, it alters some of its other qualities. This is my interest. From its initial design, was there any basic concept in the change of the aircraft, either with an attempt to obtain greater range, an attempt to obtain height, or an attempt to obtain speed—and if so, what were those modifications?

Mr. F. R. MILLER (*Deputy Minister of National Defence*): I think that some of the significance, at the stage at which the aircraft was when it was cancelled, was that there was still approximately \$300 million necessary on the development. The engines that were in the models that had flown were American engines. The Canadian-built engine that was ultimately to power it had not flown the aeroplane. Therefore, the prediction of the speed and range were extrapolated from wind-tunnel tests, from designers' calculations.

One of the important things that developed was that when the Astra and Sparrow part of the development program was cancelled and substitutions were made of the American MA-1 and Falcon missile, it provided space for considerably more fuel.

Mr. SMITH (*Calgary South*): This indicates the consequence of change in the design, or the requirements of the aircraft. Did the change, Mr. Miller, of the weapon system in any way change any of its aerodynamic qualities, anything that might have altered its estimated range or speed?

Mr. MILLER: The packaging of the weapons took smaller space in the aeroplane than the original Sparrow missile, and that made space available for added fuel, which in turn gives you some more range.

Mr. SMITH (*Calgary South*): Nothing conclusive, though, because of the state of wind-tunnel testing?

Mr. MILLER: No, I do not think so. But it must be realized that the aeroplane, despite the fact that it had flown, was still a long way from a completely operational aeroplane.

Mr. SMITH (*Calgary South*): What was the figure, again; what amount did you have to spend to the point of cancellation?

Mr. MILLER: The estimate, on the figures that I gave the other day, shows that a further \$295 million—

Mr. SMITH (*Calgary South*): What state would that have put it in? That is not fly away, is it?

Mr. MILLER: That was the estimate on which 100 operational aeroplanes would be provided, with the MA-1 system, the Falcon missile.

Mr. HELLYER: So that \$295 million additional development requirement, was part, or all of that, to complete the 37 production order?

Mr. MILLER: That was the amount of money that would have been necessary from the time—September of 1958—of that decision, to progress the aeroplane to the point where production could be started.

Mr. HELLYER: Production over and above the 37?

Mr. MILLER: Yes, these 100—to get the aeroplane into production. That was to complete the pre-production models, and—

The CHAIRMAN: To complete the 37 and get up to the 100?

Mr. MILLER: I am sorry; the 100 could be started. This was just the development cost. I do not include the production costs of the 100.

Mr. HELLYER: This \$781 million for 100 aircraft, would that amount of money complete pre-production aircraft in addition to the 100?

Mr. MILLER: Yes.

Mr. HELLYER: How many?

Mr. MILLER: Twenty aircraft. The cost of completing the 20 aircraft development program from September 1, 1958.

Mr. HELLYER: So, in effect, for an additional \$781 million you would have obtained 120 aircraft?

The CHAIRMAN: Did you hear the question, Mr. Miller? Does that obtain—

Mr. MILLER: The pre-production aircraft are not all usable in an operational way; it is estimated that eight of those 20 could be fitted out and used operationally.

Mr. SMITH (*Calgary South*): In what state might I ask—if Mr. Hellyer would permit? Are they stripped? How would the test pilots, or the company, turn them over? What additional cost might there be if turned over to the air force?

Mr. MILLER: I have not got a breakdown on those figures.

Mr. SMITH (*Calgary South*): Well, are there any—

Mr. MILLER: Some of the 20 aeroplanes would be so specialized as test vehicles that they could not be adapted to operational squadron use. But it was estimated that eight of the 20 could be, after the test program, fitted up and used by an operational squadron.

Mr. SMITH (*Calgary South*): But the fitting up would have to take place? They would be without electronic equipment; they would be used primarily for circuits and bumps; would that be the stage they would be in?

Mr. MILLER: They would all be in different stages. They were specialized vehicles; each one with a special test function.

Mr. HELLYER: As I recall the CF-100 pre-production models that were used, would it be fair to say that in addition to those of the pre-production models that could have been used operationally, each of the others would have had some utilitarian function, whether for testing, test flying, or some other purpose?

Mr. MILLER: I could not say exactly how useful they would be.

Mr. HELLYER: For example, I think one of the Mark II aircraft was fitted with some special instruments for high altitude tests, so that that operation would have been continued and presumably would be information that was valuable to the Royal Canadian Air Force?

Mr. MILLER: Yes, that is a conjecture.

Mr. HELLYER: On the basis of the usefulness of 120 aircraft, the cost of the 120 would drop to \$6.5 million from \$7.81 million?

Mr. MILLER: No, you do not get 120 aircraft. The figure is eight: you buy 92 production aircraft and use the eight salvaged pre-production aircraft to arrive at your 100 operational aircraft. That is the basis.

Mr. HELLYER: That would reduce the cost approximately \$7.2 million—

The CHAIRMAN: These are slide rule mathematics.

Mr. MILLER: This is the amount of money the completion of the program would have cost, divided by the number of operational aeroplanes you got out at the end of it.

Mr. HELLYER: That was estimated to be 108 operational aircraft?



Mr. MILLER: One hundred.

Mr. CHAMBERS: Would this cost include normal spare parts, ground-handling equipment, and so on, necessary to operate these aircraft?

Mr. MILLER: That \$781 million included a figure of approximately \$100 million for spares and ground-handling equipment.

Mr. CHAMBERS: Was that sufficient to make them operational?

Mr. MILLER: Yes, that would put them into operation.

The CHAIRMAN: I think we are duplicating quite a number of questions, gentlemen.

Mr. HELLYER: I have an important further group of questions in respect to this cost which I should like to proceed with.

The CHAIRMAN: Go ahead.

Mr. HELLYER: We have been told that 100 aircraft, 100 operational aircraft, would cost \$781 million.

In the minister's statement, 169 aircraft, plus the pre-production models, were indicated to have an estimated cost of \$2,200 million approximately. I would like to know how that was arrived at.

Mr. MILLER: That is a different aeroplane; that is the aeroplane as originally proposed, with the Astra fire control system and the Sparrow missile.

Mr. HELLYER: This statement was made to this committee just last week, Mr. Chairman; and also the same statement was made by the associate minister of defence in a speech in Toronto last Wednesday. I think it is unbelievable that he would use figures based on an aircraft which had been discarded, which was hypothetical, after the changes had been made, and giving a distorted picture to the extent of approximately \$1 billion.

The CHAIRMAN: How do you arrive at that, Mr. Hellyer?

Mr. HELLYER: I would like to pursue this. If 100 aircraft, operationally, cost \$781 million, is it fair to assume that the company would have produced another 100 fly away aircraft, without spares and armament, for an additional \$375 million, or less?

Mr. MILLER: To give the committee an idea of the difference between the two aeroplanes, I have some figures here estimating the cost of continuing with the aeroplane in Sparrow-Astra configuration.

Mr. HELLYER: I do not think we are particularly interested in the Sparrow-Astra configuration; we are interested in the CF-105, with the Hughes fire control system, which was a decision taken by the government in November, 1958, before the cancellation. That is what we are talking about.

Mr. SMITH (*Calgary South*): Surely Mr. Hellyer would be the first to concur that we are interested in, not just a stripped aircraft, but we are interested in the total cost.

Mr. HELLYER: That is quite correct.

Mr. SMITH (*Calgary South*): Whether it be the Sparrow, or the—

Mr. HELLYER: If the hon. member for Calgary South, north, east, or west, will allow me to continue.

Mr. SMITH (*Calgary South*): South. My constituents in the north are very few.

The CHAIRMAN: All right, gentlemen; let us get down to it.

Mr. PEARKES: I think it is perfectly clear that there were two sets of figures; one dealt with a certain type of fire control and weapon, and the other dealt with the new, the modified type.



The CHAIRMAN: If I recall, Mr. Hellyer, that was in the evidence in that way; a stripped airplane and—

Mr. CHAMBERS: The two figures were given.

The CHAIRMAN: The two figures were given. But go ahead, Mr. Hellyer. What is your point?

Mr. HELLYER: The point is this, that if an additional 100 aircraft cost \$375 million, then presumably not all of this ground-handling equipment would have to be duplicated for an additional 100; is that correct?

In that \$781 million figure is \$100 million for spares and ground-handling equipment. What proportion of that would be required for an additional 100 aircraft?

Mr. MILLER: I think in that you would have to realize that there was about twice as much, because we were talking about five squadrons out of the 100 airplanes, and there would be nine squadrons out of the 200 airplanes; so that your ground-handling equipment would be in the ratio of nine to five.

Mr. HELLYER: You would want to put in an additional \$100 million for spares and ground-handling equipment, approximately?

Mr. CHAMBERS: Nine to five.

Mr. MILLER: If you put in the initial spares, as a direct relationship to the original cost of the aircraft, you generally put in 30 to 40 per cent of the fly away value of the aeroplane—initial buy of spares.

The CHAIRMAN: Did you say 30 to 40 per cent, Mr. Miller?

Mr. MILLER: Yes, depending on the aeroplane and the grouping of the aeroplane.

Mr. HELLYER: Presumably the \$100 million you used in the previous estimate would be sufficient to cover 100 additional aircraft?

Mr. MILLER: Another 100, yes.

Mr. HELLYER: The figure which the minister used previously was \$50 million; but with the \$100 million you buy the armament for an additional 100 aircraft?

Mr. MILLER: We have never had any figures covering this number of aeroplanes, on that configuration, with the MA-1, Falcon, so we are making rather broad assumptions here.

Mr. HELLYER: I think this is important, because this is the aircraft that was being considered, which was being dealt with at the time of the cancellation; and it is obvious from these figures that an extra 100 aircraft over and above the original 100 could have been procured, including spare parts, ground-handling equipment and armament, for an additional \$100 million; so an additional 200 aircraft could have been procured for approximately \$200 million, which is \$1 billion less than the figure used by the minister in his evidence, and by the associate minister in a speech in Toronto last week.

This seems to me to be a careless handling of important figures, when you can toss around \$1 billion and mislead, perhaps inadvertently, people in their thinking about the costs of this aircraft by relating cost to a hypothetical fire control system which had been cancelled months previously.

The CHAIRMAN: We are talking about two aeroplanes.

Mr. SMITH (*Calgary South*): If these are opinions, I wonder if I might quote from the record, at page 338. I propose to ask a question on the defence estimates for 1958. I want to ask you whether you have changed your mind at all in the replies that you gave.

Mr. Pearson said to you, at this time Mr. Minister:

Would the minister agree that subsequent to the decision taken perhaps three years ago—I am not sure of the date—to proceed with the planning and development of the CF-105, the Arrow, there have been very important changes in respect of the increased efficiency of the manned bomber for attack and the development of intercontinental ballistic missiles, and if so does he think those changes have a bearing on the policy which should be adopted from now on in respect of the development of the CF-105?

And Mr. Benidickson inquires of you, sir:

To put it another way; if we proceed—

Mr. HELLYER: Mr. Chairman, may I—

The CHAIRMAN: Just a moment; Mr. Smith is asking a question.

Mr. SMITH (*Calgary South*): Mr. Benidickson said:

To put it another way; if we proceed to purchase the CF-105's to the extent they would be required to equip our squadrons operationally in 1961, I believe I have read that to have the necessary spares, parts, and so on, our investment in the CF-105 would be in the nature of \$1 billion.

Mr. Pearkes, you then replied, sir:

Well, I think that that would be purely an estimate. We have no accurate figure on that.

You had at that time, then, no accurate figures; is that right?

Mr. PEARKE: That is correct.

Mr. SMITH (*Calgary South*): My second question, then, is in respect to Mr. Pearson, who obviously at this time raises some doubt about the suggestion of going ahead with the Arrow. This is Mr. Pearson; and you replied to him, sir:

I am convinced, in my own mind, that we are still faced with the threat of the manned bomber—

I am not going over the evidence again. You have indicated the basis of how this threat was arrived at; but you say it was over a prolonged period; is this correct—at least, a period of time, and certain circumstances, which made you come to this conclusion?

Mr. PEARKE: We were still faced with the threat of the manned bomber in 1958.

Mr. HELLYER: Mr. Chairman, that is the point of whether it was expedient or necessary to continue with the program or not. What I had been dealing with was the cost figures and the fact that it seemed to me grossly misleading and, to a certain extent, irresponsible, to use figures based on a control system and missile which had, by decision of the present government, been deleted and substituted for several months before the cancellation.

The CHAIRMAN: You are trying to get at two figures. There is a figure of \$2,200 million—

Mr. HELLYER: That is right.

The CHAIRMAN: And one of about \$1,300 million, or somewhere around there.

Mr. HELLYER: Yes.

The CHAIRMAN: One without the control missile, and one with.

Mr. HELLYER: No, they each had a control system and missile. It is just the difference between the one originally intended for the aircraft and the one subsequently substituted.

The CHAIRMAN: Can you answer that question, Mr. Minister? Let us bring it to a head.

Mr. MILLER: I think it would be useful to understand exactly what that \$2,200 million that has been mentioned consisted of. It was to continue the development. First of all, it embraced the cost from the beginning of the program; that is, the total cost from the beginning of the program. The figures that were given for 100 aircraft were the cost from that time forward of 100 aircraft; it ignored approximately the \$300 million that had already been spent on the program. A large element of the \$2,200 million is to continue and complete the development of the Astra system and the Sparrow missile, as well as the airplane itself. So that the cost, the comparable cost between the 200 airplanes and 100 airplanes, to a certain extent, is like attempting to compare apples and oranges.

Mr. HELLYER: I agree with that to an extent, but I cannot altogether. I would like to question the minister on what he said with regard to the later costs and earlier costs, in the minister's statement—and the speech made by the associate minister—in which it was said:

—that estimated sum apart from expenditures to date.

Mr. CHAMBERS: Which estimated sum?

Mr. HELLYER: \$2,285,000,000 required for the continuation of the contract.

The CHAIRMAN: Your point is what?

Mr. HELLYER: My point is this is completely irrelevant.

Mr. CHAMBERS: Where is this information coming from?

Mr. HELLYER: The minister's statement to this committee.

Mr. CHAMBERS: Where, what page?

The CHAIRMAN: I think, gentlemen, in all fairness, so that we can all work together, if you quote something from the evidence, give us the page and paragraph.

Mr. SMITH (*Calgary South*): I think that is a good idea. I asked questions on page 338, concerning Mr. Pearson's doubts about the future of the Arrow. Mr. Benidickson's figures are on page 339.

Mr. CHAMBERS: I wonder if we could all be issued with slide rules, so we can all keep up with Mr. Hellyer.

The CHAIRMAN: No, they are too expensive.

Mr. HELLYER: I do not think the parliamentary secretary would know how to use one.

Mr. FAIRFIELD: In reading that statement it says:

That estimated sum apart from expenditures to date was to be, over the years, more or less as follows:—

The CHAIRMAN: Where is this?

Mr. FAIRFIELD: This is reading from page 5 of the minister's statement.

The CHAIRMAN: Let us find that in the minutes.

Mr. ROBERGE: That is page 89, at the bottom of the page.

The CHAIRMAN: Thank you, Mr. Roberge.

In September of 1958 the Prime Minister announced a cost-sharing program—



Mr. FAIRFIELD: If Mr. Hellyer would take his slide rule and add up those expenditures, apart from expenditures to date, he will find that it comes to \$1,818,000,000, which is different from his \$2,289,000,000. So that is, apart from the expenditures to date, about \$400 million.

Mr. CHAMBERS: It seems to me that Mr. Hellyer is being very misleading in his use of quotations, because he quotes two statements of the minister from different statements, and puts them together and arrives at a conclusion which is not warranted by the evidence.

Mr. HELLYER: Quite to the contrary, I was quoting from the evidence.

The CHAIRMAN: This is turning into one of those dog-fights and we are not getting any place. I thought, when we started this morning, we were rehashing a whole lot of evidence. If you start at page 89 and continue on to page 90, I think you get the answer to: Why the two figures, Mr. Hellyer. I think the full evidence is here, and I think that if we all did a little more homework we would not have to ask the same question three or four times, and we would eventually get it reported.

Mr. HELLYER: In an earlier statement a comparison between apples and oranges was given. There is a figure given for 200 aircraft, costing \$2,289,000,000. There is another figure for 60 production aircraft, still relating, if I may say so, to aircraft with the Astra fire control system in the Falcon and the Sparrow missile, at page 90. My contention is that these figures are completely irrelevant and misleading; that they should not have been included in the evidence; and that they should not be used in speeches by the minister, because they are meaningless and they distort the picture in the mind of the public in respect to the proposed cost of this aircraft, as it was intended at the time of the cancellation.

The CHAIRMAN: Your assertion is these figures are wrong?

Mr. HELLYER: That they are meaningless.

The CHAIRMAN: They are erroneous and meaningless?

Mr. HELLYER: Right.

The CHAIRMAN: Then they are wrong, if they are erroneous.

Mr. PEARKES: I have not the actual page, but I have my typewritten statement.

The CHAIRMAN: It is pages 89 and 90.

Mr. PEARKES: I referred to the possible alternative program and then I go on to say—and this is page 90:

Certainly the final estimates of the costs that were received were never contemplated in the early consideration that was given to this project. In fact the costs had risen from an early estimate of \$1½ million to \$2 million per—

It says here “plan,” but that should be:

—per plane, to \$12.5 million, that is, \$12,500,000 per plane, if it had included the original fire control system; or \$7,800,000, if the alternative or modified fire control system had been introduced.

Mr. HELLYER: When you say—

The CHAIRMAN: Just a moment, Mr. Hellyer.

Mr. PEARKES: I show quite clearly that there were two types of plane; and I say that if we had gone ahead with the modified one, then it would have cost \$7,800,000 per plane. Had we gone ahead with the original one, with the Sparrow, then that would have cost \$12½ million—

Mr. HELLYER: Mr. Chairman, in paragraph—



The CHAIRMAN: Just a moment, Mr. Hellyer, please. You asked a question, and the minister is giving you an answer.

Mr. PEARKES: Then at the bottom of page 89 I gave some figures.

Mr. CHAMBERS: In this last paragraph, at the bottom of page 89, in the last sentence it says:

—apart from expenditures to date.

The CHAIRMAN: I think it is right here.

Mr. PEARKES: I did not give in this paper the figure of \$303 million. I said that it was in addition to the costs already spent, so these figures here do conform exactly, with that one exception of the increase of \$303 million. If you want to know when that was spent, I have some figures here. That \$303 million was made up—

Mr. HELLYER: Which \$303 million is that?

The CHAIRMAN: The figure that he mentioned.

Mr. PEARKES: The one I mentioned when I referred to the money not already spent. Were you asking about that?

Mr. HELLYER: No, but—

The CHAIRMAN: Go ahead, sir.

Mr. PEARKES: I can only give the breakdown per year. I do not know if it is material.

Mr. HELLYER: I asked a question in respect to the statement the minister just re-read, paragraph 3, page 90, which is as follows:

—or \$7,800,000, if the alternative or modified fire control system had been introduced.

Mr. PEARKES: Yes.

Mr. HELLYER: Is it not a fact it had been introduced in November, 1958?

Mr. PEARKES: No. We were testing to see whether it could be introduced during those years. I think I am correct in saying there was never a 105 flown with Falcon included in it.

Mr. HELLYER: Never flown? Was a contract made with the Hughes fire control people to produce and install their system?

Mr. PEARKES: There was no production ever ordered for any CF-105. Regarding this Falcon and the fire control system, we were trying to see whether that could be included. That is why I say:

—or \$7,800,000, if the alternative or modified fire control system had been introduced.

If the alternative or modified system had been adopted, then it would have been \$7,800,000 for one. I cannot say today that it had been adopted; it had not. We were testing to see whether it was practical to introduce the Falcon.

Mr. HELLYER: The minister is getting carried away with words, because the Prime Minister, in a statement, indicated that the new fire control system was to be installed. As I understand it, there was a contract between the Department of National Defence and the Hughes fire control people.

The CHAIRMAN: Did not the minister just state there was not?

Mr. HELLYER: He said there was not a production contract, and he was hinging it on the word "production," which he did not define.

The CHAIRMAN: There is quite a difference though.

Mr. HELLYER: If we might return to page 89, the bottom paragraph, it says:

In February of 1959 the CF-105 was finally cancelled. At that time the estimated total costs of the Arrow program for a pre-production order of 37 aircraft and a production order of 169 aircraft, including fire control and weapons system, amounted to approximately \$2,289,000,000.

But at that time the Astra fire control system had been cancelled. Therefore, if this was an estimate, it was an out-dated estimate, based on a system which had been cancelled some months earlier.

The CHAIRMAN: What is your question?

Mr. HELLYER: The question is: Why, then, were these figures used after the change in policy had been reached?

Mr. PEARKES: All I can say is this, that the modified system, that is, the Falcon system, was being tested.

The Prime Minister in his statement—and this is a press release that he made on September 23—said:

In the meantime, modifications of the CF-105 will be made during its development to permit the use of a fire control system and weapon already in production for use in U.S. aircraft engaged in North American defence. The important savings achieved by cancelling the Astra and Sparrow programs and substituting these alternatives now in production would amount to roughly \$330 million for a completed program of 100 aircraft.

We were testing out and seeing whether it was possible to put in this Falcon, the modified control system. As I said, at the time they were cancelled the two had never been linked together. I think I made it quite clear there were two types. There was the original type, which was more expensive. We were trying to see whether we could get any real reduction, which would justify continuing, and the final decision was taken.

Mr. HELLYER: Is there any reason to believe—

The CHAIRMAN: Just a minute, Mr. Hellyer. Mr. Winch had a supplementary question.

Mr. WINCH: It appears to me there was a conflict between the statement that was just read by the minister, the press release of the Prime Minister, which said:

—now in production—

whereas, a few moments ago, the minister said, it never went into production.

The CHAIRMAN: I do not think he said it was in production here.

Mr. PEARKES:

In the meantime, modifications of the CF-105 will be made during its development—

Mr. WINCH: But just carry on a moment.

Mr. PEARKES:

—to permit the use of a fire control system and weapon already in production for use in U.S. aircraft engaged in North American defence. —that is, the weapon was already in production; that is the Falcon.

Mr. WINCH: But not the fire control?

Mr. PEARKES: Not the fire control. The two had never been linked to the CF-105.

Mr. HELLYER: One final question on that subject. Would the minister say if anything in respect to the proposed installation of the Hughes fire control system led him to believe that it would not have been successful?

Mr. PEARKES: We did not know. The two were never linked together.

Mr. HELLYER: Of course, you did not know about the Astra either, which had not been fully developed; and the Hughes was successful as used in other aircraft.

The CHAIRMAN: Your question, Mr. Hellyer?

Mr. HELLYER: The question is: I think either the Prime Minister or the minister is on record somewhere—and I wish I could find it, but I will not be able to this morning—as saying that the proposed change to the Hughes fire control system appeared to be satisfactory.

Mr. PEARKES: We hoped it would be satisfactory. Until it has been put in a plane, I do not see how you can be positive.

The CHAIRMAN: Does the item carry, gentlemen?

Mr. BALDWIN: May I ask a supplementary question on that?

The CHAIRMAN: Yes, Mr. Baldwin.

Mr. BALDWIN: Mr. Minister, you made a supplementary statement, on page 96, in which you referred to the Prime Minister's statement.

The CHAIRMAN: Which paragraph, Mr. Baldwin?

Mr. BALDWIN: The third paragraph.

You asked the minister if he had a supplementary statement to make, Mr. Chairman. The minister referred to the Prime Minister's statement of February 20, 1959, which I think has to be read with his statement then:

It is estimated that with these changes the total average cost per unit for 100 operational aircraft could be reduced from the figure of about \$12,500,000 each to about \$7,800,000 each.

Reading that with the Prime Minister's statement of February 20, 1959, it makes it quite plain, and I would like the minister's comment on that, where the Prime Minister said:

Since my announcement of last September much work has been done on the use of a different control system and weapon in the Arrow. These changes have been found to be practical. Although the range of the aircraft has been increased it is still limited. It is estimated that with these changes the total average cost per unit for 100 operational aircraft could be reduced from the figure of about \$12,500,000 each to about \$7,800,000 each, including weapons, spare parts and the completion of development, but not including any of the sum of \$303 million spent on development prior to September last.

Mr. Minister, your supplementary statement is intended to be read in connection with the Prime Minister's statement?

Mr. PEARKES: That is correct.

Mr. HELLYER: That is the quote I was thinking of where the Prime Minister said changes had been found to be practical.

The CHAIRMAN: Any further questions? Does the item carry?

Item agreed to.

Now we go on to mechanical equipment including transport, under major procurement and production costs.

Mr. HELLYER: Are engines included under that same item?

Mr. CHAIRMAN: Under this mechanical equipment item, I imagine.



Mr. HELLYER: I wonder if the minister—

The CHAIRMAN: Perhaps Mr. Miller could check that. Yes, it is all right.

Mr. HELLYER: I wonder if the minister could give us any information as to whether the Iroquois engine developed was finally scrapped completely, or whether any part of it has been stored, to the point where it could be resurrected, if necessary?

Mr. PEARKES: The production was continued. Orenda are building engines now, for a new plane at this time. That is the 104.

Mr. HELLYER: I was thinking of the tooling and predevelopment engines which were being tested. Were they demolished or destroyed, or have they been preserved?

Mr. PEARKES: I would not know.

Mr. HELLYER: Did the company advise the Department of National Defence of the interest of the French government in the possibility of obtaining 300 of these Iroquois engines if they proved successful?

Mr. PEARKES: Yes, I recall an interest expressed by the French government, but to the best of my knowledge it was never pursued.

Mr. HELLYER: Did the Department of National Defence reply formally to the communication from the company that interest of the French government had been indicated?

Mr. CHAMBERS: Would this not be Defence Production, Mr. Chairman?

The CHAIRMAN: Undoubtedly it would, but possibly the minister here knows.

Mr. PEARKES: The Department of National Defence would not have replied formally to that, because these inquiries would be made through the Department of Defence Production. However, I do recall such inquiries were made, but subsequently they were not followed up by the French government.

Mr. HELLYER: Do Defence Production sharing arrangements lie, in your opinion, more within the jurisdiction of the Department of Defence Production than within that of your department?

Mr. PEARKES: We place the order with the Department of Defence Production, and they try to work out the best deal they can, and that would involve cost sharing.

The CHAIRMAN: Any further questioning? May the item carry?

Item agreed to.

The CHAIRMAN: Armament equipment. Questions?

Carried?

Mr. HELLYER: On this item, the actual expenditure was considerably less than the estimate. I wonder if the minister could tell us the reason for that?

The CHAIRMAN: The expenditure was down, roughly, from \$2,300,000 to \$1,200,000.

Mr. PEARKES: Yes. This estimate contained the provision of \$1,525,000 for equipment related to the Sparrow program, which was subsequently cancelled. Most of this money remained unspent.

The CHAIRMAN: Further questions?

Carried?

Item agreed to.

The CHAIRMAN: Signal and wireless equipment, a little over-expenditure. Questions?

Item agreed to.

The CHAIRMAN: Special training equipment, quite a bit under estimate. Questions?



Mr. SMITH (*Calgary South*): I would like to know, if we could have just a rough reason, as to what is included in here.

Mr. PEARKES: The explanation given to me is that the cash requirements in 1958-59 for the CF-100 simulator were over-estimated by about \$1,400,000. The remainder of the over-estimate resulted from cancellation of the program for radar trainers and equipment related to the Arrow program.

The details of actual expenditures were: Audio-visual aids, \$297,000; flight simulators and instrument trainers, \$2,396,000; demonstration panels, \$19,000, and various miscellaneous articles, \$73,000.

Mr. SMITH (*Calgary South*): You say there is an over-estimate on the requirement of simulators. Is there anything further—and perhaps Mr. Miller could advise us on this—as to why this was the case?

The CHAIRMAN: The explanation of the over-estimate?

Mr. MILLER: When you buy airplanes you buy the simulators with them, and where programs are cancelled or changed—

Mr. SMITH (*Calgary South*): This is just with respect to the CF-105?

Mr. MILLER: Yes, chiefly with respect to them.

The CHAIRMAN: Further questions, gentlemen?

Item agreed to.

The CHAIRMAN: Miscellaneous technical equipment, a little under-expenditure.

Mr. SMITH (*Calgary South*): I wonder if I could just go back. Mr. Miller said “chiefly”. May I ask him, without categorizing it, what it was, percentage-wise—80 per cent of the over-estimate because of cancellation of the Arrow; or was there any other item in there which was responsible for the over-estimate?

Mr. MILLER: No, I think that is the largest single element of it. I have not a total breakdown of these items.

The CHAIRMAN: It would be pretty hard to give a percentage.

Mr. SMITH (*Calgary South*): The answer is, it was basically because of the cancellation of the Arrow—is that correct, Mr. Miller?

Mr. MILLER: That is right.

The CHAIRMAN: Miscellaneous technical equipment. Any questions?

Item agreed to.

The CHAIRMAN: Ammunition and bombs.

Mr. WINCH: I notice that outside of 1956-57—when only \$6,200,000 were required—the R.C.A.F. requires anywhere from approximately \$16 million to approximately \$24 million annually for ammunition and bombs. In the year under review it was \$19,196,000. I would just like to ask: Is this the amount that is required for the annual use of the R.C.A.F. in peacetime for ammunition and bombs, or are you stockpiling?

Mr. PEARKES: In this year there was a certain provision for the procurement of Sparrow missiles, which was discontinued; hence, you had the saving. But we are not building up any stocks of ammunition. This is the money which would be mainly spent during the year.

The CHAIRMAN: In answer to Mr. Winch's question, you have spent approximately \$20 million a year for production and testing of ammunition and bombs?

Mr. PEARKES: No, that is not quite correct. We were, at that time—

Mr. SMITH (*Calgary South*): Mr. Chairman is a good witness.

Mr. PEARKES: At that time we were acquiring a certain number of aerial torpedoes. The estimates provided \$16,651,000 for the production of bombs, torpedoes and missiles, of which only \$10 million was spent. Part of this under-expenditure was also due to the mark 44 torpedo program, which progressed slower than was expected. That is a new torpedo which can be fired from the air to water, and then travel submerged to the target.

Mr. WINCH: Could I ask a following question?

The CHAIRMAN: Yes, Mr. Winch.

Mr. WINCH: This happens to be a fairly close continuation from around \$16 million to \$24 million a year for the R.C.A.F. on ammunition and bombs. Can the minister give us an approximation as to how much of this money is lost because this ammunition, year by year, is declared obsolete, or because they have not those kinds of weapons anymore? In other words, how much money are we spending on ammunition and bombs which we are not able to use in peacetime, because of changes in weapons?

Mr. PEARKES: I could not give it for this year. However, I will have it for you when we come to the estimates for this coming year.

Mr. WINCH: I am speaking now in connection with the accounts.

Mr. PEARKES: I will have to get that information.

Mr. WINCH: I rather gathered, from what you said a few moments ago, that one reason for what appears to be a great amount of money is because of ammunition which is longer of any use, on account of the new weapons. Could you tell me: is it 5 per cent; or 50 per cent, or what.

Mr. PEARKES: I could not give you that information. However, I will get it for you.

Mr. WINCH: That will be fine.

The CHAIRMAN: Would you be satisfied, Mr. Winch, if we obtained that answer for you; and then we could close the item?

Mr. WINCH: It is bad enough if we have ammunition which is blown to blazes, but it looks still worse if we buy ammunition that has to be destroyed.

Mr. PEARKES: We will get you the full details on the ammunition expenditure.

The CHAIRMAN: May the item carry?

Carried.

The CHAIRMAN: Are there any comments on the transfers of equipment charged to mutual aid?

Mr. SMITH (*Calgary South*): I have a question.

The CHAIRMAN: Has it to do with mutual aid?

Mr. SMITH (*Calgary South*): No; it is in regard to NATO air training.

The CHAIRMAN: Then, Mr. Hellyer.

Mr. HELLYER: In regard to mutual aid, was the under-expenditure primarily because there were no takers for the equipment offered, or because there was no equipment offered?

Mr. PEARKES: I would say it was mainly because we were not able to get people to take the equipment, on the recommendation of the council.

Mr. HELLYER: Could the minister give us any indication of the type of equipment which we offered, and which was not taken up?

Mr. WINCH: And, at the same time, could he say whether it was because, as the weapons were useless for us, they were useless also for everybody else.

Mr. PEARKES: Not necessarily.

I can give you the information. So far as the navy was concerned, the original program included four Algerine minesweepers, valued at \$8 million,

and only two ships were transferred. The balance of the navy short-fall consisted of a number of miscellaneous items which proved unsuitable for mutual aid purposes.

In regard to the army, it consisted of various items which proved to be unattractive to prospective recipients. They were probably articles which were out of date—World War II articles, which could not be utilized by our allies.

In regard to air, the original program included 40 Sabre aircraft, valued at \$20,622,000, which were not formally offered as mutual aid when it was learned they would not likely be of interest to prospective recipients. Delays were encountered in receiving recommended allocations of 50 T-33's, valued at \$11 million, with the result they were not offered in 1958-59. Of a total provision of \$6 million worth of spare supports for the CF-100 aircraft to Belgium, only \$2,500,000 was required.

Mr. HELLYER: Was the lesser requirement because of a lower attrition rate, or what was the reason?

Mr. PEARKES: I could not give you the reason why Belgium did not have the requirement. Perhaps, they had not the money to meet it that year—I do not know.

Mr. SMITH (*Calgary South*): Mr. Chairman—

The CHAIRMAN: Is it still on this item?

Mr. SMITH (*Calgary South*): No.

The CHAIRMAN: May this item carry?

Carried.

The CHAIRMAN: Next is NATO air training.

Would you proceed, Mr. Smith.

Mr. SMITH (*Calgary South*): Might I ask, Mr. Minister, if you could outline briefly the basic financial arrangements with the NATO participants in the air training plan in Canada. It is only applicable at that time, because we are not training now.

Mr. PEARKES: They paid so much per student; I think it was \$5,000, and we provided the facilities, generally.

Mr. SMITH (*Calgary South*): Is it not true that the agreements with the NATO countries varied considerably, and that the contracts with the participants were not consistent, one with the other?

Mr. MILLER: Originally, Canada provided all that training free of charge. It was a total charge to the mutual aid account of Canada.

As member countries of NATO built up their own forces and their own training schemes, the larger ones dropped out—the United Kingdom, France and Italy. However, Norway, Denmark and Holland did not have the facilities to set up training at home, and we continued to provide training for them. In an effort to ensure that the selection of the pilots sent out was as good as could be, we agreed with them that there would be some token payment made by the government for each pilot entering training out here—and a figure of \$5,000 was agreed upon. That was applicable to the three countries which continued.

Mr. SMITH (*Calgary South*): This pertains to the same period. By nature, because of the cancellation or termination of the agreements with the participants, you had to take into your own service a fairly substantial number, I would assume, of aircrew, who no longer had any useful purpose in training NATO students. This brings me to my next question, and perhaps you can answer both of them together.

Based on your experience, Mr. Minister, or Mr. Miller, and recognizing, of course, this was part of Canada's contribution to NATO, would you do



it the same way, if you had to do it all over again? Was it not a rather unsatisfactory arrangement, in so far as Canada was concerned, recognizing it was a contribution?

Mr. PEARKES: There was an urgent need, at the time, to assist these NATO countries to build up their air forces. This arrangement was entered into soon after the formation of NATO. I am not prepared to say whether we would do the same thing all over again. We probably have learned from experience and would, therefore, be able to make modifications.

Mr. SMITH (*Calgary South*): In regard to the new estimates, perhaps you would like to take this as notice. I assume that if any other countries asked you, you would do it probably on a somewhat different basis. Is that not correct?

Mr. PEARKES: We are not undertaking this type of training now.

The CHAIRMAN: He has asked a hypothetical question; give him a hypothetical answer.

Mr. WINCH: In regard to the 1958-59, I would like to ask if, under this plan, we were training any German pilots?

Mr. PEARKES: Yes, I think we were. Yes, that is correct; we were training pilots, but the Germans were paying for all the facilities they received.

Mr. WINCH: Did it not seem paradoxical that Canada should be training pilots from a country which twice led us into war?

Mr. PEARKES: You must remember that very shortly after 1955, the Germans were admitted to NATO.

Mr. SMITH (*Calgary South*): World conditions produce very strange bed-fellows.

Mr. WINCH: When this was agreed upon, was it not sufficient that you had been double-crossed once, and that democracy would not be double-crossed again?

The CHAIRMAN: That is another hypothetical question.

Mr. WINCH: It is not a hypothetical question, because it is in the minds of hundreds of thousands of people in Canada, especially the veterans.

The CHAIRMAN: I realize that.

Mr. CHAMBERS: What year were the arrangements entered into with Germany?

Mr. HELLYER: 1956.

Mr. WINCH: They considered Versailles a scrap of paper.

Mr. PEARKES: Either 1955, 1956, or 1957.

Mr. CHAMBERS: Early 1957?

Mr. HELLYER: I am quite sure it was under the Liberal administration, if that is the answer you want.

Mr. PEARKES: It was certainly before I took over the department.

Mr. CHAMBERS: Was this arrangement made under the auspices of the associate minister at that time?

The CHAIRMAN: Are there any further questions?

If not, may the item carry?

Carried.

The CHAIRMAN: Expenditures from special accounts is next. Are there any questions?

Mr. WINCH: There must be an explanation there, because it goes from \$30 million up to \$159 million.



The CHAIRMAN: That was covered pretty well in the statement.

Mr. WINCH: That was the transfer of accounts?

The CHAIRMAN: Yes.

May the item carry?

Carried.

The CHAIRMAN: We now proceed into the defence research board. It is now fifteen minutes of eleven.

Mr. WINCH: You will notice, in connection with this, that from 1955-56, we go anywhere from \$64 million up to \$82 million, and now \$74,360,000. I would like very much to have a statement on just what is covered under the expenditure of \$74 million for defence research and development? How is it related to defence research and development in the United Kingdom and the United States? Is there any duplication? Are the United Kingdom and the United States, through their resources, doing anything there that could be supplied to us, without our having to go into this type of heavy expenditure to this extent, in a country of this size and with our resources?

The CHAIRMAN: It is now fifteen minutes of eleven. Would it satisfy the committee and Mr. Winch if we withheld that over-all statement until Friday morning at 9.30?

Mr. PEARKES: Dr. Field is here, and he could give you a short statement.

The CHAIRMAN: We will hear his statement today, and you can ask questions in connection with it on Friday.

Dr. G. S. FIELD (*Chief Scientist, Defence Research Board*): Mr. Chairman, I do not know whether I can answer, in a short statement, all the questions which Mr. Winch has raised, but I think I could say a few things to put this in perspective.

In relation to the total of \$70 million which, I think, in the first instance, should be noted as being broken down into two items:

The first item concerns the Defence Research Board, which is, essentially, a research organization, and which spends something of the order of, perhaps, \$30 million. In the year under discussion, I think it was of the order of \$26 million or \$27 million. The rest of the amount, making up the \$70 million, relates to service development—army, navy and air force items. The services required certain specific items for their operations, in the nature of new equipment, and the Defence Research Board assisted them in developing those particular items. There are many items in that \$45 million odd.

With respect to the operations of the Defence Research Board, as I have said, these are, essentially, research. These activities are very closely integrated with the defence research activities of the United Kingdom and the United States particularly, although we do have relations also with other NATO countries. But the programs of the Defence Research Board are worked out in detail, after many discussions with our friends, by generally defining certain parts of programs which, for various reasons, seem most appropriate to our facilities, both in personnel and in equipment in Canada.

So, the question as to whether or not there is considerable overlap can be taken care of by the general remark that we do not enter into programs until we have, in general, discussed them with our friends, or come to a full understanding of what they are doing, so our programs are complementary to the programs conducted elsewhere. Generally, as I have said, these are undertaken, because we think we have useful facilities through which we can make a particularly good contribution. These facilities are often geographic. We have, for example, the far north, which introduces climatic and geographical factors, which make it easier for us to undertake certain experiments than for the United Kingdom or the United States.

The other thing we sometimes have is a particular group of individuals who, through specialized training and as a result of experience and background research are, perhaps, better equipped to enter into a program more quickly than the United States and Great Britain—although I did say that our program also has to take into account what the other NATO countries are doing.

That is a very general statement, Mr. Chairman, and if any one would like to raise more specific questions, or query me on anything, I will be glad to answer them.

The CHAIRMAN: We will withhold the questions until the next meeting.

Mr. WINCH: Will you also be answering questions in regard to development, or would someone else be answering those?

Dr. FIELD: I can answer many of such questions, but if some arise which I cannot, I will get the answers for you.

—The committee adjourned.

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## ORDER OF REFERENCE

THURSDAY, May 26, 1960.

*Ordered*—That the name of Mr. Cardin be substituted for that of Mr. Roberge on the Special Committee on Defence Expenditures.

Attest.

L.-J. RAYMOND,  
*Clerk of the House.*





# MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

FRIDAY, May 27, 1960.

(8)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Fairfield, Forgie, Halpenny, Hellyer, Lambert, Macdonald (*Kings*), Webster, Winch—(10).

*In attendance:* Honourable George R. Pearkes, Minister of National Defence; Mr. F. R. Miller, Deputy Minister; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns; Dr. G. S. Field, Chief Scientist, Defence Research Board; Mr. P. S. Conroy, Controller General, Inspection Services.

The Committee resumed from Wednesday, May 25th, consideration of the Expenditures of the Department of National Defence for the fiscal year 1958-59.

The Minister, Mr. Miller, Mr. Conroy and Dr. Field were questioned.

The Committee completed the consideration of the Expenditures of the Department of National Defence for the fiscal year 1958-59, but it was agreed that the subjects of the returns on pages 114 and 117, about which the Minister undertook to supply further information, could again be discussed when such information was available to the Committee.

The Chairman thanked the Minister and the officials for their help and observed that Mr. Miller's attendance today would be his last in his capacity as deputy minister.

On behalf of the Committee, the Chairman expressed best wishes and good luck to Mr. Miller in his new position as Chairman of the Chiefs of Staff which he will assume on June 1st.

After some discussion, it was agreed that the Committee, at its next sitting, would proceed with the consideration of the 1960-61 Estimates of the Department of National Defence.

At 10.48 o'clock a.m. the Committee adjourned to meet again at 9.30 o'clock a.m., Wednesday, June 1st, 1960.

Antoine Chassé,  
*Clerk of the Committee.*



## EVIDENCE

FRIDAY, May 27, 1960.  
9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. Mr. Miller would like to get away on vacation on Monday, and if it is agreeable, I think we should dispose of him first, if there are quite a number of questions on defence research. Have you many questions, Mr. Winch?

Mr. WINCH: Yes, quite a few.

The CHAIRMAN: If it is agreeable with everybody, I think we should hold defence research board, and let us see how we get along with departmental administration, inspection services, mutual aid, and the miscellaneous. Is that agreeable to all?

Agreed.

The CHAIRMAN: Let us start on departmental administration. Are there any questions on civil salaries and wages? The expenditure is slightly less than the estimate. Questions?

Agreed.

The CHAIRMAN: The next item is civilian allowances. Are there any questions?

Agreed.

The CHAIRMAN: The third item is professional and special services. Are there any questions, gentlemen?

Agreed.

The CHAIRMAN: Travelling and removal expenses. Questions?

Agreed.

The CHAIRMAN: Postage. Are there any questions?

Agreed.

The CHAIRMAN: Telephones, telegrams and other communication services. Are there any questions?

Agreed.

The CHAIRMAN: Publications. Any questions?

Mr. LAMBERT: Yes, Mr. Chairman. In this connection, is there much demand from the public for publications from D.R.B. This is all under defence research board?

The CHAIRMAN: No; defence research board is just the top part, Mr. Lambert.

Mr. LAMBERT: Mr. Chairman, the heading says, D.R.B. administration.

The CHAIRMAN: You are right, Mr. Lambert; at the top of the page it says, D.R.B. administration. But then you have defence research board as a subheading. Under that you have research, and development of navy, army and air; and then you have total research and development, at the end of D.R.B.

Now we come back to the whole department, and that is what we are questioning right now. Are there any questions, Mr. Lambert?

Agreed.

Mr. LAMBERT: Mr. Chairman, the previous examination has been on civil salaries and wages. What is the difference between civil salaries and wages, for instance, on this? Is it because the accounting set-up has been that there is this particular island, or particular group, that is known as departmental administration?

Hon. G. R. PEARKES (*Minister of National Defence*): Departmental administration, in the main, covers administration of the headquarters here at Ottawa; and these are the expenses connected with the administration of the department as a whole, the expenses which come directly under the deputy minister.

The previous section dealt entirely with defence research board. You referred to the head of the paper. Yes, there is defence research board; there is administration; there is inspection services, mutual aid, and other. They are all separate.

Mr. LAMBERT: Accepting that; but in so far as the Department of National Defence, the departmental administration breakdown here, as against, in the previous—

The CHAIRMAN: You mean, as is broken down to navy, army, air force?

Mr. LAMBERT: That is right.

Mr. WINCH: Is it not national defence headquarters we are dealing with now?

Mr. PEARKES: These are the expenses in connection with the administration of the department, as opposed to the administration of the army, the navy, or the air force.

The CHAIRMAN: Are there any further questions, Mr. Winch, or did that satisfy you?

Mr. WINCH: That is fine.

The CHAIRMAN: Shall that item carry?

Agreed.

The CHAIRMAN: Office stationery; a little under expenditure. Questions?

Agreed.

The CHAIRMAN: Material and supplies. They are just about on the nose. Questions?

Agreed.

The CHAIRMAN: Miscellaneous equipment. Questions?

Agreed.

The CHAIRMAN: Pensions. Questions?

Mr. HELLYER: Mr. Chairman, I have one question on this. I noticed an article in one of the papers the other day of the liability in respect of the retirement allowances of the armed forces. Perhaps this just covers administration staff—I am not sure. But, would the minister give us what the total liability of the crown is, over and above expenditures already budgeted for, in respect of these retirement allowances?

Mr. F. R. MILLER (*Deputy Minister of Defence*): This item, obviously, does not cover the services as a whole: this is only the departmental administration. The larger fund, the financial status of the retirement fund and its finances—is that what you were interested in?

Mr. HELLYER: That is the question that arises as a result of this article, it seems, yes.

Mr. MILLER: I think, to attempt to give an explanation of that, the financial soundness of that, would really—we could give you a paper on it; but without—



Mr. HELLYER: I will not press it, Mr. Chairman. I just wondered if they had any information available.

The CHAIRMAN: Thank you.

Mr. WINCH: Mr. Chairman, may I ask a question here?

The CHAIRMAN: Yes, certainly.

Mr. WINCH: I imagine my question would come under other benefits.

Is there any provision, any policy, if a person under this department here—suppose he is hurt on the way to N.D.H.Q., or hurt on the way going away from it. Is he covered at all?

Mr. PEARKES: A man who is on duty is covered for accidents. With regard to a soldier proceeding to his ordinary daily work, I would consider him as being on duty.

Mr. WINCH: I remember quite a few years ago there was a great deal of trouble there on changing policies, and I was wondering whether that had all been corrected.

Mr. PEARKES: I do not know whether you are referring to military personnel or civilian personnel.

Mr. WINCH: Anyone who is covered under administration here.

Mr. MILLER: This item could only cover civilian personnel.

Mr. WINCH: They are all covered, are they?

Mr. MILLER: Under government compensation.

Mr. WINCH: Is there a difference between civilian personnel coverage and the armed personnel coverage?

Mr. PEARKES: Yes.

Mr. WINCH: What is the difference? If they are civilians, they are covered under one basis; and if they are armed personnel?

Mr. PEARKES: They are covered under the terms of service in which they are provided with hospitalization. If they are killed, or if they are completely disabled, they would come under the Canadian Pension Act.

Mr. WINCH: And if they are killed, the widow—

Mr. PEARKES: En route to duty.

Mr. WINCH: With regard to the widow or the dependents, they are then covered under the Pension Act; is that it?

Mr. PEARKES: They would come under the Pension Act, yes: under the Canadian Pension Act, not the Militia Pension Act. There are two acts. The Militia Pension Act deals with long service, under which, of course, they would be covered, because they would get a 50 per cent pension.

Mr. WINCH: Thank you.

Agreed.

The CHAIRMAN: All other expenditures. The expenditure is 'way under the estimate. Questions?

Agreed.

The CHAIRMAN: Inspection services: civil salaries and wages. An under-expenditure. Questions?

Mr. LAMBERT: Mr. Chairman, in this connection, during 1958 and 1959 it had been indicated that, with the declining procurement with respect to national defence, this item was likely to be decreasing in so far as personnel were concerned.

Mr. PEARKES: In 1958-59 we had come to the end of a heavy construction period—there was a decreasing need for the inspection services, particularly in the equipment field.

The CHAIRMAN: What is the name of your inspection services now: is it still the same as during the war?

Mr. PEARKES: Inspection services.

The CHAIRMAN: That is all it is.

Mr. PEARKES: Yes.

The CHAIRMAN: Department of National Defence?

Mr. PEARKES: Yes.

Agreed.

The CHAIRMAN: Professional and special services. Questions?

Mr. CARTER: Just what is involved in professional and special services; what kind of services are these?

Mr. PEARKES: They would be some very specialized type of inspection services which our ordinary inspectors would not be able to carry out.

Mr. P. S. CONROY (*Controller-General of Inspection Services*): From time to time it is necessary to go to outside services for professional advice, such as Lloyd's of London; and sometimes from other professional people in the United Kingdom, and so on. We have to pay for these services.

Mr. CARTER: What is the reason for the big reduction, as compared with the estimates for previous expenditures?

Mr. CONROY: The main reason there is that there were fewer contracts let outside the country in 1958-59.

The CHAIRMAN: Are there any further questions?

Agreed.

The CHAIRMAN: Travelling and removal expenses. Again, a reduction.

Mr. WINCH: Why is that so heavy, on inspection?

The CHAIRMAN: I beg your pardon?

Mr. WINCH: No, I imagine it is not, though, at that.

The CHAIRMAN: Carry?

Agreed.

The CHAIRMAN: Freight, express and cartage. Questions?

Agreed.

The CHAIRMAN: Postage. Questions?

Agreed.

The CHAIRMAN: Telephones, and so on. Questions?

Agreed.

The CHAIRMAN: Office stationery. Questions?

Agreed.

The CHAIRMAN: Materials and supplies. Questions?

Agreed.

The CHAIRMAN: Acquisition and construction of buildings and works, including acquisition of land, purchase of real properties.

Mr. LAMBERT: Is this the result of merely a changing of accounting procedures, because I notice there was nothing there in 1955 through to 1957. There was some in 1957-58. Then we get a rather substantial amount, proportion-wise. In actual thousands of dollars, not so great. But how do these inspection services require land and buildings?

Mr. PEARKES: This is the requirement for some test ranges at Nicolet.

The CHAIRMAN: Any further questions?

Agreed.

The CHAIRMAN: Construction. No expenditure, so I think that will carry.

Agreed.

The CHAIRMAN: Day labour and minor contract projects. Are there any questions?

Agreed.

The CHAIRMAN: Repairs and upkeep of buildings and works. That is right on the nose, 12 and 12. Questions?

Agreed.

The CHAIRMAN: Rentals of land. Questions?

Agreed.

The CHAIRMAN: Acquisition or construction of equipment, quite an under-expenditure. Any questions?

Mr. MACDONALD (*Kings*): I wonder if we could have a brief explanation of what is covered in that item?

Mr. CONROY: Construction of equipment?

The CHAIRMAN: Yes.

Mr. CONROY: That is principally for the artillery proof range at Nicolet. The reason for that under-expenditure is the cancellation of several big projects, including a static rocket bay. The other projects have been carried on, but we have endeavoured to cut down the expenditures there, until the situation was more or less stabilized.

Mr. WINCH: How does that come under "inspection services"?

Mr. CONROY: We do all the proofing of all armaments—guns, gun carriages, etc.—purchased by National Defence. That proofing is done at Nicolet, Valcartier and also at Long Branch.

The CHAIRMAN: Carry?

Item agreed to.

The CHAIRMAN: Repairs and upkeep of equipment. Questions? Carry?

Item agreed to.

The CHAIRMAN: Municipal and public utility services. Questions? Carry?

Item agreed to.

The CHAIRMAN: Pensions, etc. Questions? Carry?

Item agreed to.

The CHAIRMAN: All other expenditures—miscellaneous. Questions? Carry?

Item agreed to.

Mr. WINCH: How come you always hit that right on the nose?

The CHAIRMAN: Yes, that is right—right on the nose.

If I recall correctly, we held one item open for Mr. Hellyer. It was, "printing of departmental reports and other publications," under R.C.A.F. We stood that, and Mr. Hellyer wanted some information.

Mr. PEARKES: That has been handed in. It is a long list of publications. You handed it to Mr. Hellyer himself.

The CHAIRMAN: Mr. Hellyer, did that list you received satisfy you on the subject?

Mr. HELLYER: I have some further questions, either for now or on some other occasion, Mr. Chairman. When are we going to continue with the defence research board?

The CHAIRMAN: We can pretty well go on now and clean that up. Then, possibly, we could go back to your item later. Are there many questions on mutual aid? May we turn to the last page, "mutual aid"? The first item under this is "procurement for mutual aid". The expenditure is \$1 million on an estimate of \$1½ million, approximately. Any questions, gentlemen?

Carry?

Item agreed to.

The CHAIRMAN: Transfers to NATO countries of equipment from service stocks—an under-expenditure. Any questions? Carry?

Item agreed to.

The CHAIRMAN: NATO aircrew training. Questions?

Mr. CARTER: That expenditure is much lower than the actual expenditure in 1957-1958. It is down from \$26 million to \$6 million. Is there any special reason for that large decrease?

Mr. PEARKES: We were discontinuing the training of pilots for the NATO countries, the reason being the NATO countries, by this time, were establishing their own training systems.

Mr. MILLER: I think the committee will recognize this is just a summation of the mutual aid items you have seen, service by service, as you have gone through.

Mr. CARTER: Yes.

The CHAIRMAN: Contributions to infrastructure and NATO budgets.

Mr. WINCH: Pardon my complete ignorance, but could I get a complete understanding of "infrastructure"?

Mr. PEARKES: Infrastructure deals mainly with the construction of all projects for NATO, the cost of which is shared by all the NATO countries. Canada pays a certain percentage of the cost, shall we say, of the maintenance and construction of all NATO projects, be they buildings, be they airfields, and that sort of thing. It does not include personnel.

Mr. WINCH: Does Canada pay on a definite percentage basis every year, or is there a budget every year as to what Canada is to contribute?

Mr. PEARKES: We have to estimate each year how much they are going to spend, and then what our percentage of it will be. It is not easy to estimate, because the NATO countries fall short of their estimated expenditures almost every year.

Mr. WINCH: If and when there is a break-up of NATO, or Canada withdraws from it for any reason, is that expenditure considered a contribution in the way of airfields or anything else, or does Canada get anything back from the country that is left with it?

The CHAIRMAN: Do you mean if Canada did ever get out of NATO?

Mr. WINCH: Yes.

Mr. PEARKES: I could not say there is any agreement I know of that Canada will be reimbursed, in any way, for the contributions that she has made to NATO.

Mr. WINCH: I can understand our contribution of personnel and armed forces, but here you would be leaving something behind; and I was wondering whether there would be any different policy with regard to that?



Mr. PEARKES: Here we are paying our share of the construction of air-fields, buildings, and so forth, which are erected in NATO countries. We have had no infrastructure spent in Canada. There has been nothing coming out of this that has ever been built in Canada.

Mr. WINCH: On that basis, then, as far as NATO is concerned, it is not concerned with anything in the way of construction in North America?

The CHAIRMAN: That is on infrastructure?

Mr. WINCH: On an infrastructure basis.

Mr. PEARKES: That is correct. Canada has never asked for any infrastructure buildings here, on the North American Continent.

Mr. WINCH: Can I just ask then: In view of the fact Canada is expected to and does contribute to world defence, so far as the democracies are concerned, has it never been considered that the defence of North America is also completely tied in with defence in any other NATO country; and, if so, on what basis is Canada not assisted?

Mr. PEARKES: As you know, the Canada-U.S. region is one of the NATO regions. But because of the distance away from Europe, and the fact we have been able, by entering into agreements direct with the United States, to do the construction which has been done in Canada, which is of mutual benefit to the rest of NATO, we have always paid for it ourselves. I am thinking of the DEW line construction, for instance. That was done under arrangements made between Canada and the United States.

The benefits of the DEW line, of course, mainly accrue to Canada and the United States; but indirectly—or, perhaps, quite directly, they benefit the rest of the NATO countries. However, we have made added contributions. And never since NATO was formed has there been any infrastructure money spent on Canada.

Mr. WINCH: The navy on the Atlantic coast directly or indirectly comes under NATO command?

Mr. PEARKES: Yes.

Mr. WINCH: Has there never been any NATO construction work done in there?

Mr. PEARKES: Not in Canada. It has been considered, say, in the way of fuel storage, but none has ever been spent.

Mr. CARTER: Those percentages, Canada's percentage contribution to the infrastructure, how is that determined? Is that on a per capita basis or on a G.N.P.?

Mr. PEARKES: On an agreement basis, and we pay between 5 and 6 per cent.

Mr. CARTER: There is no formula; it is not based on any formula at all?

Mr. PEARKES: It is an agreed percentage.

The CHAIRMAN: That would be an agreed formula, to start with?

Mr. PEARKES: Yes, at NATO.

Mr. CARTER: That is, a different agreement every year?

Mr. PEARKES: Does it differ every year?

Mr. CARTER: Yes.

Mr. PEARKES: I think it is practically the same every year. It may vary a small percentage, but it is between 5 and 6 per cent.

Mr. CARTER: Is Canada's contribution to defence structures in Canada or North America taken into account at all?

Mr. PEARKES: I think, in general, the fact we are not asking for infrastructure to be spent in Canada would be related to the smallness of our percentage there.

Mr. WINCH: Could I ask one more question?

The CHAIRMAN: Yes, Mr. Winch.

Mr. WINCH: I notice that in 1957-58 the actual expenditure was \$10,468,000. For 1958-59 it was estimated you would require almost double that, \$21,500,000; whereas, actually, you only needed \$2 million more than you did in 1957-58—\$12,406,000. Was there some peculiar circumstance there, where you thought you would have to more than double the amount under this item?

Mr. PEARKES: We have practically no control over the expenditures. They are let by contract. Contracts usually go to European firms, and they just were not able to spend the money. It is very difficult for us to estimate. We know the budget which is put in. Our representative there, over on the council, he agrees to the general, overall budget. But when it comes to the expenditures connected with that budget, we really have no control over that. So, if a French firm, for instance, is not able to do the construction work that it has tendered for, our estimate is out because we have to base our estimate on the budget.

Mr. WINCH: And yet you say you have practically no control?

Mr. PEARKES: That is correct.

The CHAIRMAN: You mean, control of deliveries, I think.

Mr. PEARKES: Budgetary control?

Mr. WINCH: That is the point I am interested in.

Mr. PEARKES: There is budgetary control. There is a meeting every December which the finance minister attends, and there is the examination of the budgets. Of course, our permanent representative, Mr. Léger has ambassador rank. He examines all these proposals and safeguards Canada's position there.

The CHAIRMAN: Any further questioning, gentlemen?

Mr. BALDWIN: Mr. Chairman, is it under this item that our contribution to the NATO research program comes?

The CHAIRMAN: The NATO research program?

Mr. BALDWIN: I imagine the details will come out in connection with the defence research, but I am thinking of such things as science fellowships.

The CHAIRMAN: Possibly Dr. Field will know.

Mr. PEARKES: I am advised it did not in 1958-59, the year we are dealing with.

Mr. BALDWIN: I see. Well, did we make any contribution at all in 1958-59 to NATO research?

Dr. G. S. FIELD, (*Chief Scientist, Defence Research Board*): We did have two people on loan to the research centre at the Hague. We paid their expenses while they were doing research work there, but that was not charged to infrastructure.

Mr. BALDWIN: Details with regard to our participation in the benefits of the NATO research program will probably come under Dr. Field's evidence, when he is dealing with defence research?

The CHAIRMAN: That is right.

May the item carry?

Item agreed to.

The CHAIRMAN: Miscellaneous: Defence expenditures by other government departments.

Mr. WINCH: Could we have a brief explanation as to what other government departments do, and what this is about?

Mr. PEARKES: Mainly the Department of Transport, in connection with the weather services. The actual expenditures by the Department of Transport, with respect to meteorological, airway traffic control, and other services provided to the Department of National Defence on a recoverable basis. That is one of the items, and they fell short by \$700,000.

The CHAIRMAN: Is that one of the big items, Mr. Minister?

Mr. PEARKES: Yes, that is one of the biggest items.

The CHAIRMAN: Further questions?

Carry?

Item agreed to.

The CHAIRMAN: Grants to military associations, etc. That is right on the nose. Any questions? Carry?

Item agreed to.

The CHAIRMAN: Grants to the town of Oromocto. Where is Oromocto?

Mr. PEARKES: Oromocto is adjacent to Gagetown.

The CHAIRMAN: Thank you very much. Carry?

Item agreed to.

The CHAIRMAN: Pensions and other benefits, etc.? Questions? Carry?

Item agreed to.

The CHAIRMAN: Let us get back to Dr. Field, gentlemen; that is, the defence research board. The first item, Mr. Winch, is civil salaries and wages.

Mr. WINCH: No, I understood we were going to deal with it generally first, Mr. Chairman.

The CHAIRMAN: Let us clean this up section by section. Civil salaries and wages? Any questions, gentlemen? Carry?

Item agreed to.

The CHAIRMAN: Other operating costs, any questions?

Item agreed to.

The CHAIRMAN: Construction?

Mr. LAMBERT: In this connection, does this represent anything towards the construction of a wind tunnel project?

Dr. FIELD: I think it does. We did make certain contributions to the wind tunnel. Yes, there was a contribution in that year to a wind tunnel.

Mr. LAMBERT: To what extent?

Dr. FIELD: \$400,000.

The CHAIRMAN: Any further questions? Carry?

Item agreed to.

The CHAIRMAN: Equipment, questions? Carry?

Item agreed to.

The CHAIRMAN: Now we come to development in the navy, an expenditure of \$2,405,000, to an estimate of \$3,740,000. Any questions?

Mr. HELLYER: Yes, Mr. Chairman.

Mr. WINCH: I find it difficult to understand how we are going to handle this.



The CHAIRMAN: I will tell you what I think we should do, Mr. Winch. If you do not mind, let us get to "air", and we will hold that open for any questions.

Mr. WINCH: It rather strikes me—and I do not know how the other members think—that it might be better if we can get a general discussion first, because that might lead to something you might want to deal with in particular.

The CHAIRMAN: Would you like to try that for size, Mr. Winch, and proceed with your questions? Then we can close them all at one time.

Mr. WINCH: As I explained at the last meeting, I would appreciate it if Dr. Field could give us a broad picture of the main work. First of all, under research—on which we spent \$26 million; and then the main type of research and development, under the development end of it—on which we spent \$47,700,000 last year. What was the type of work that was being undertaken? And was there any of it at all that was not done after consultation and collaboration with the other countries in their research and development work?

Dr. FIELD: The Defence Research Board, as I said at the last meeting, is entirely concerned with defence research and is doing research in a number of fields. I can quote some examples. Air defence has been a very active research problem in the board. Antisubmarine research has been another. Communications research is another one. We are also doing research work on the defensive aspects of nuclear weapons, bacteriological weapons and chemical weapons. There have also been researches carried out on the behaviour of the individual in a difficult environment—by which I mean, the problems encountered by air crew, the difficulty of breathing at high altitudes, even when they do have oxygen—that sort of thing, which we describe as bio-sciences research. These are illustrations of the general area.

With respect to development, the items listed and the amounts cover many items, most of which are rather small. A lot of these items refer to modifications to equipment, modifications to telecommunications equipment, to radio receiving and transmitting equipment, and radar. It covers a certain amount of work on vehicles; it also refers to personal equipment. In fact, it refers to hundreds of separate items.

With respect to the very large amount which you notice under "Air", this item was in at the time the CF-105 was current, and there was money in this vote for aircraft frames and engines, which refers largely to the 105; that is the reason for that large item at that time.

The CHAIRMAN: Mr. Winch, I might say for review after this meeting, if you like, that this is pretty well outlined in pages 13, 14 and 15 of the white paper of 1959, if you would like to make a note of that.

Now, are there any definite questions?

Mr. WINCH: I would like to ask a question on this: I think I gathered from Dr. Field that he said some of this research dealt with chemical and bacteriological weapons—I think he said that. I would like to have as much information as we can get on just what Canada is doing, and especially if it is weapons.

Dr. FIELD: I think I remarked that our effort in these fields was related to finding means for defending ourselves against such weapons. We are not concerned with making weapons in the fields I have mentioned, but only with trying to devise means for defending ourselves, with regard to the possibility of enemies using such weapons against us.

Mr. WINCH: Is this not being very fully studied by countries which have far greater resources than we have? What is the particular reason why this study should be made in Canada?



Mr. PEARKES: We have exceptional facilities, which were started during the second world war on a mutual basis between England, Canada and the United States, where they established a large area near Suffield, Alberta, for testing with regard to chemical warfare.

That experimental station has continued ever since, and we have got a lot of valuable information from that. That information is shared amongst the three countries that I have mentioned.

Mr. WINCH: Could I ask how much was spent on that phase that year?

The CHAIRMAN: I was wondering, Mr. Minister, is there any contribution ever made by our allies to the particular specified work we have here in Canada, or is that our share under a mutual pact of some type?

Mr. PEARKES: I will have to get advice on that, but I believe the United Kingdom make a very substantial contribution towards the Suffield project; that is, in personnel.

Dr. FIELD: There have been visitors at times, but the actual maintenance of Suffield is a Canadian responsibility.

There are organizations in all three countries. We have had, since the war, a tripartite agreement, with a meeting each year, at which the program is discussed, and allocations under that program are made to each country, depending on the facilities and capability it has for undertaking particular phases of the program. But the contribution within each country is paid for by that country out of its own purse.

With respect to your earlier question, as to the amount of money, we have not exact figures on this, but I am informed it is roughly of the order of \$3 million.

The CHAIRMAN: I notice our actual expenditures have balanced out very well since 1955—\$64 million, \$69 million, \$78 million, \$82 million, \$74 million. We are not taking much more of the load than we did then. Is that right?

Dr. FIELD: That is exactly right, Mr. Chairman.

Mr. WINCH: In connection with the research end, itself, on which there was \$26 million, could Dr. Field give any approximation as to the expenditure there for research or testing, because of the northern regions of Canada?

Dr. FIELD: I cannot give you a complete answer on that. We have a northern lab at Churchill, in which place, during that year, we spent \$188,000, but there are many parts of our program which are related to northern aspects of defence. For example, we are continually concerned with communications in the north, and that work is done in labs in Ottawa and elsewhere. It would be very difficult to give you figures, because the program is so interwoven. In almost every one of our programs there are northern aspects, and we have never attempted to separate these into expenses relating to particular northern applications and other more general applications.

I think I should say that many of our programs are greatly influenced by the fact that we do have the north at our door. We realize that we have a responsibility there and, therefore, many of our programs are slanted in that direction.

As an example, I mentioned communications, which means that when we take on a communication problem, we must particularly look at the northern side, since the northern aspect is made more difficult because of the aurora borealis.

Mr. WINCH: I also understand that a great deal of testing is done of weapons and equipment which are developed and produced in the United States—and I understand they are tested in northern Canada. Are those tests

undertaken by this branch and, if so, are they paid for by Canada? I am referring to the testing of weapons, clothing, and so on.

Dr. FIELD: We, in the defence research board, have little to do with the testing of weapons; it is largely the responsibility of the services themselves. For example, we have had some tests in Canada on United States missiles, but that has been done by the army, and is not carried under the research at all.

The CHAIRMAN: It does not come under your heading?

Dr. FIELD: No.

Mr. WINCH: How do you test them in order to find out what is going to happen? When the committee was up there three or four years ago, I know there was an American gun being tested. In connection with this, do you tie in at all on research, as to the changes that might be made, and so on, or do they send up the scientists from the United States?

Dr. FIELD: They do not come up here until they have progressed to the stage of user trials. The development trials—that is, as to whether they meet the specifications—are done earlier. When they are brought up to Canada for Arctic tests they are at the “user trials” stage. We sometimes have had referred to us certain problems which may have arisen during the trials, but the trials themselves are not a research matter.

Mr. PEARKES: I would like to make one point clear. You mentioned the words “United States missiles”. There has been no testing of intercontinental ballistic missiles by the United States in Canada.

Mr. WINCH: What kind of missiles from the United States have been tested in Canada?

Mr. PEARKES: The short range Nike weapon, which is a ground to air defensive missile weapon.

Mr. WINCH: What kind of warhead does it take?

Mr. PEARKES: No nuclear warheads have been tested in Canada. The Nike can take either a conventional or a nuclear warhead. However, no nuclear warhead has been tested in Canada.

Mr. WINCH: Although the transcript is not available yet, if my memory serves me right, I believe Dr. Field said at our last meeting that no development program is carried on in Canada, without a prior consultation and agreement with other countries, and particularly the United States.

Dr. FIELD: I was referring particularly with respect to research.

Mr. WINCH: I am referring now to the second section, on development.

Dr. FIELD: I thought your remarks about duplication referred to research, and this is what I was discussing. I discussed it first. I do not think I made any comment about coordination of development, although it is true that is coordinated. However, we, in the Board, do not have the same responsibility for coordination of development; that is the responsibility of the services. The Board's responsibility is to vet the program from the point of view of scientific and technical possibilities. However, the services themselves have the coordination machinery for discussing development programs with other countries. There are certain tripartite organizations which deal with coordination.

Mr. WINCH: I would like to ask, in this period under review, what vehicles or weapons were under development study, outside of the CF-105?

The CHAIRMAN: Is that security, Mr. Minister?

Mr. PEARKES: No, I think we can give that information.

For instance, there would be the personnel carrier, the Bobcat, which would have been under research at that time.

The two major ones were the army air truck and the Bobcat. The army air truck was a flying boxcar, known by—

The CHAIRMAN: Was it DeHavilland?

Mr. PEARKES: There was no money put into the Avrocar—

Dr. FIELD: It is identified as the Caribou or CC-108. It is the Caribou that was produced by DeHavilland.

Mr. WINCH: In regard to this army carrier, or whatever you called it, and the Bobcat, was that development started after consultation with and agreement with any other country on developmental purposes?

Mr. PEARKES: The Bobcat was started some years ago, and I am not in a position to say whether there was any consultation with other countries before the development started. However, soon after the development had started, I know that contact was made with other countries.

Mr. WINCH: Could I ask whether the Bobcat is a vehicle of a defensive or offensive nature.

Mr. PEARKES: It is an armoured personnel carrier, to give protection to personnel who are moving from one part of the battle field to another.

Now, as Canada has no offensive intentions at all, I think you could describe that as being a purely defensive vehicle, because war would have started before it ever came into use.

Mr. WINCH: If the information you obtain from papers and magazines is correct, the Bobcat is a half-track vehicle, twice the size of a Bren carrier, and capable of carrying from one-half a section to one section of troops, and two or three mortars. Is it that type?

Mr. PEARKES: Yes.

Mr. WINCH: You say it is strictly a defensive vehicle. I do not know whether or not the answer to my question would be classed as security—but you read it in the newspapers and magazines. In the event it would be put to use to prevent aggression, how would it be utilized in what, I presume, would be a military attack to destroy repair and fuel depots, first. How could it be, as a heavy vehicle?

Mr. PEARKES: Reserves of fuel are necessary to maintain the whole defensive position. If your main reserves of fuel are destroyed, as undoubtedly they may be, if there is a war—and we are visualizing that the next war will be of short duration.

Mr. WINCH: The minister has stated that it is strictly for use in the event of an attack. It is capable of being used for what I think would be a major purpose—and that is for carrying an efficient anti-tank weapon?

Mr. PEARKES: It could carry an effective anti-tank weapon, but the main purpose of it is for carrying the troops to a position where they dismount, and fight from here. It is not an armoured vehicle from which it is intended, primarily, that the troops will fight.

The CHAIRMAN: Basically, it is a means of transportation.

Mr. PEARKES: Basically, it is a personnel carrier.

Mr. WINCH: Could I ask if any offer has been made, and if so, with what results, to sell those to other countries, who will be up against the same proposition; and with what success?

Mr. PEARKES: I can say this. In so far as 1958-59 is concerned, no success had been obtained in selling it to any other country. I can go further than that and say that to date, we have no orders for the Bobcat from any other country.



Mr. WINCH: I have one other question, but perhaps someone else could proceed, to give me an opportunity to properly phrase it.

The CHAIRMAN: Are there any further questions in connection with the defence research board?

Mr. BALDWIN: Does the question of participation in the NATO sciences fellowships come under your jurisdiction, or under national research?

The CHAIRMAN: 1958-59?

Mr. BALDWIN: Yes.

Dr. FIELD: We did not participate in any fellowships in that year. I made an earlier reference, but this is to the SHAPE Air Defence Technical Centre, where we posted two people to assist them.

Mr. BALDWIN: I understand that in the year 1959, there were 150 scientist fellowships under the NATO defence research program, and I wondered whether we had participated and whether any fellowships had been awarded in Canada.

Dr. FIELD: Not as far as I know; certainly, nobody in the Defence Research Board.

Mr. BALDWIN: I suppose it would be too early to question as to the participation in such things as the anti-submarine research program of NATO, and materials research? I understand they were only set up in 1959.

Dr. FIELD: Yes, but I can answer in respect to the anti-submarine research centre, where we have posted one person.

Mr. BALDWIN: That is the base in Italy?

Dr. FIELD: Yes.

Mr. BALDWIN: Would it be under your department that the necessary work would be done in connection with the bilateral arrangement with the United States for the space satellite—the one we are constructing in Canada.

The CHAIRMAN: Was that in 1958-59?

Mr. BALDWIN: I presume that the program was in effect in 1958-59.

Dr. FIELD: Again, that program was just under consideration at that time, but again I do not mind answering it.

This program arose out of the fact that the defence research board has, for many years, been conducting research into the upper atmosphere, particularly designed to gather information which will help us to detect and track incoming ballistic missiles from the north. Now, our program, up until now, has enabled us to go up a limited distance, some 60 to 80 miles, where there is a reflecting layer which stops radio waves from below. We were trying to get above that layer, and we were offered a satellite booster from the United States. If we wanted to use a satellite and put instrumentation devices in it, they said they would provide the satellite booster. This is being designed to look down to the top of this layer, which we have previously had great difficulty in penetrating.

Mr. BALDWIN: Does Canada retain sole control in regard to the instrumentation and technical make-up?

Dr. FIELD: It is entirely Canadian designed, and we have full control.

Mr. WINCH: In view of the fact—and I presume it is a fact; it must be—that all our NATO allies would be up against the same proposition as Canada, to counteract aggression, there must be, therefore, something to provide mobility for these forces. Was there no other vehicle available from any of our NATO allies and if not, were they not, or are they not, undertaking similar research?

Mr. PEARKES: In 1958, there was no other vehicle available. Other countries were carrying out parallel research in connection with a similar type of vehicle. Other countries today are carrying out research and development of



vehicles which are of the same general type and classification. There has been no success achieved in getting standardization on the Bobcat.

Mr. WINCH: But it still gives rise to the question. If, as the minister now states, that at this time there was no such vehicle available but that there was and are parallel studies being made in all the countries, do you not think there should be some basis, so that all countries will not be trying to develop the same thing at the same time?

Mr. PEARKES: I could not agree more heartily with you.

One of the weaknesses of NATO is a lack of standardization in weapons, duplication in research and development, and even in the production programs of weapons. However, in spite of all efforts which have been made by myself, and I know, my two predecessors, to get standardization, we have never made any substantial advances, except in the general standardization of the F. N. rifle.

We have a Canadian, who is chairman of the standardization committee of NATO, but we have not been able to make any substantial progress. There is a rival interest in countries. Different countries have slightly different requirements, and they develop along slightly different lines. Then, there are the demands of local industries to get the job of producing or developing any particular item. I do not know how you can get agreement amongst the free nations in NATO.

Mr. WINCH: If what you say is correct,—and if you said it it must be—I think it is a most unfortunate situation that in this matter of defence, this matter of protection of the homeland and homelands, that local demands have an influence, with the result that taxpayers money is being expended by each country, and particularly by Canada.

Mr. PEARKES: As I say, it is recognized that standardization would be a good thing. It is an advantage which dictatorial countries, such as Russia, have over a group of allies.

Mr. MACDONALD (*Kings*): My question has been partially answered by the minister. I was going to ask about this standardization committee. They were sitting when I was taking a military course at Rivers, Manitoba, a few years ago. I wondered if they met periodically, and how long they do meet?

Mr. PEARKES: The standardization committee of NATO is in permanent session.

Mr. WINCH: In view of what the minister had said, that there was no success achieved in interesting any other country in the Bobcat, will Canada be in a different position than it was on the CF-105 which, of course, was of far greater magnitude, that if you develop what you think will be a suitable weapon, meeting the standards of Canada, it will come within the financial ability of Canada to produce it for its own use and services only.

Mr. BALDWIN: Are we not getting into the broad question of policy?

Mr. WINCH: That is why I asked the minister.

The CHAIRMAN: Mr. Winch, I think we could get that in the estimates much easier than now.

Mr. WINCH: Except, the money was spent during this year.

Mr. PEARKES: There are very earnest efforts being made to interest the United Kingdom, the United States and other countries in the purchase of the Bobcat.

The CHAIRMAN: If you waited, Mr. Winch, you could find out how much money was spent on Bobcat research during 1958-59.

Mr. WINCH: I will have to get that answer, and the other answer when we reach the estimates.

The CHAIRMAN: Have you a question, Mr. Carter?

Mr. CARTER: I would like to ask just one question.

Has the defence research board been able to gather information or scientific data from satellites put in orbit by other countries?

Mr. PEARKES: Not in the expenditures of this year.

The CHAIRMAN: Is your question relevant, Mr. Carter?

Mr. CARTER: I am just asking what they have been able to collect.

The CHAIRMAN: In 1958-59?

Mr. CARTER: Yes.

Mr. PEARKES: The answer is that there were no satellites in orbit in that year.

The CHAIRMAN: Would you proceed, Mr. Hellyer?

Mr. HELLYER: Under development—navy and army, the expenditures are down proportionately about one-third. Were there any development programs in either navy or army which were discontinued or slowed down, which would account for this under-expenditure?

Dr. FIELD: Are you referring to a particular item?

Mr. HELLYER: Yes. I am referring to development costs for the navy and army during the fiscal year.

The CHAIRMAN: You mean the \$55 million compared to \$45 million?

Mr. HELLYER: I was referring specifically just to the navy and army.

Mr. PEARKES: Most of the under-expenditures may be traced to three development projects. This is dealing with the navy—and you were asking about the navy.

Mr. HELLYER: The army and navy.

Mr. PEARKES: There was an under-expenditure in the project known as the tactical data processing system, in the amount of some \$300,000. There was another under-expenditure of some \$200,000 in the equipment known as the V.D.S. equipment, and there was an under-expenditure of \$245,000 in main gearing design and production investigation.

Those are the three main items in which there were under-expenditures.

Mr. HELLYER: What is the V.D.S., and why was the tactical data processing system no longer required?

Mr. PEARKES: The estimated expenditure was largely for the construction of prototype equipment for evaluation. During the year it became apparent that in order to meet planned ship conversions and construction programs, it would be necessary to omit the prototype test and go directly into production. In connection with the first production model being used for evaluation, some money was spent during the year, leaving an unspent balance of approximately \$350,000.

Mr. HELLYER: While we are on this subject, could we have the reason for the under-expenditure in connection with the army?

Mr. PEARKES: The estimates for expenditures were prepared over a year in advance of the prior fiscal year, to determine the amount required. It also involves solving many unknowns. There is not very much here on that. There is no significant trend in these expenditure figures. Expenditures in 1957-58 were higher than usual, because large expenditures were incurred in that year. Apparently, there was no particular project which was discontinued.

The CHAIRMAN: Have you a question, Mr. Winch?

Mr. WINCH: I am trying to get this through this morning. However, I have two questions. Was the other development, which was mentioned by Dr. Field as being one of the major developments in 1958-59, carried through to completion, or was it dropped? What do you call it—a cargo air carrier?

Mr. PEARKES: The Caribou.

Mr. WINCH: Was that carried through to completion?

Dr. FIELD: Yes, it has been carried through to completion.

Mr. PEARKES: A grant was made.

Dr. FIELD: The Department of National Defence made a grant to the company, which put up most of the money itself, but there was an interest in it, so the government made a certain amount of money available to the company to assist with that program. They finished it recently, and a number of those have been sold to the American army.

Mr. WINCH: Either under the research section or the development section, did you have anything to do with any research or development of a type of bomb shelter for use in Canada for the purpose of survival?

The CHAIRMAN: In 1958-59?

Mr. PEARKES: Not in that year.

Dr. FIELD: There was none.

Mr. WINCH: Was there in the following year?

Mr. PEARKES: There has been research in years after 1958.

The CHAIRMAN: Is there any further consideration of the defence research board?

May the whole item carry?

Agreed.

The CHAIRMAN: Mr. Hellyer, you had some questions on printing of parliamentary reports and other publications.

Mr. HELLYER: It is on page 114 of the evidence. Obviously, some of these publications are repeats from previous years. I wonder if the minister could tell me which one in this list was the first publication which was new in the year 1958-59?

The CHAIRMAN: The first original publication in 1958-59?

Mr. HELLYER: Yes.

Mr. PEARKES: I am afraid I could not tell you that offhand. We would have to get that information.

The CHAIRMAN: We will get that.

Mr. PEARKES: Those which were published for the first time.

Mr. HELLYER: Yes. They seem to be consecutive numbers. I wonder if you could, from the consecutive numbers, mark the beginning of this particular fiscal year?

Mr. PEARKES: They are not numbered in that way. We have to get that information.

Mr. HELLYER: If you have a list available, could you tell me what CAP672 and CAP673 would be?

The CHAIRMAN: Mr. Hellyer, I do not think they are available today. Would you go on with your questioning and we will see if we can supply this information for you later.

Mr. HELLYER: It may require some additional information. I have no objection. I can tell the department specifically what I would like to have on the understanding that it will be produced.

Mr. PEARKES: If we know what you wish definitely, we can obtain it.

The CHAIRMAN: Will you give me the information you require?

Mr. HELLYER: Yes.

The CHAIRMAN: We will hold this item over.

That is the only item. I do not know whether it will be necessary even to hold that open, if you get the information you require.



Mr. HELLYER: So long as we have the undertaking that it can be discussed later when we have the information.

The CHAIRMAN: Is that agreeable?

Agreed.

Mr. HELLYER: I have another question on another subject. The return to Mr. Smith on page 117, appendix "C", indicates the cost of maintaining piston driven training aircraft. In respect of the Mitchell aircraft, I wonder how many aircraft that expenditure applies to?

The CHAIRMAN: The item is closed, but I do not see any reason why we cannot give you that information.

Mr. PEARKES: In this appendix "C" it does not give the numbers. Apparently we were not asked for that. We would have to get that information. You would like to know the number of machines covered by this?

Mr. HELLYER: The number of aircraft and the number of flying hours for the year for the Mitchells.

Mr. WINCH: I notice the cost of maintaining the Harvard is \$1,128,000. Is this the plane in respect of which two blew up? Was that the Harvard?

Mr. PEARKES: No. The Harvard is the basic training plane. We have a very large number of Harvards in operation.

Mr. WINCH: I was wondering about the type of plane, one of which recently went down.

Mr. PEARKES: That is the Mitchell which is in service now as a communication and transportation aircraft.

Mr. WINCH: There are two instances in which there have been, shall we say, similar accidents.

Mr. PEARKES: I regret to say there have been two accidents to Mitchells. One was this year and one some time previously—I am told it was in 1957.

The CHAIRMAN: Gentlemen, thank you very much. I want to thank all the departmental officials who are with us.

There is one point in which I know you will be interested. This is probably Mr. Miller's last appearance as deputy minister of the department.

Mr. PEARKES: That is right. On Wednesday, he assumes his duties as chairman of the chiefs of staff committee.

The CHAIRMAN: On behalf of this committee I would like to say we wish you all the luck in the world in your new position. You have been very cooperative.

Mr. WINCH: Before we adjourn could you give us any idea as to how you intend to start at our next meeting. Will there be a statement from the minister and the departmental heads, or how do you intend to introduce the subject of the estimates which will be before us.

The CHAIRMAN: I think before we go into the next meeting we will have a steering committee meeting. I would suggest we have it on Monday afternoon right after the orders of the day.

Mr. HELLYER: Could we not have it today? I will not be here on Monday.

The CHAIRMAN: Would Tuesday be satisfactory?

Mr. HELLYER: Not too satisfactory.

The CHAIRMAN: We will see what we can do.

Mr. HELLYER: Is it agreed that the minister will be prepared to start off with an explanatory statement.

The CHAIRMAN: Yes.

Mr. PEARKES: I will follow any procedure you wish.

The CHAIRMAN: Thank you very much, gentlemen.

The committee adjourned.



## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S,  
WEDNESDAY, June 1, 1960.

(9)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Cardin, Carter, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Lambert, Parizeau, Smith (*Calgary South*), Webster, Winch—13.

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (*Finance*); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns.

The Department officials supplied additional information asked for on Friday, May 27th, relating to the returns appearing on pages 114 and 117 of the printed record of Minutes of Proceedings and Evidence.

The Chairman read a communication from Mr. Pearkes in which the Minister proposed to give a brief statement outlining government policy prior to the consideration of the various items of the 1960-61 Estimates of National Defence.

The Chairman informed the Committee that the Subcommittee on Agenda and Procedure had met the previous day to discuss the manner in which the Committee might proceed with the study of these Estimates, and the question of calling of witnesses other than the Minister and the Departmental officials, and had only agreed to refer these matters to the Main Committee for determination.

Whereupon Mr. Fairfield moved, seconded by Mr. Smith (*Calgary South*),

That the Committee proceed, as suggested by the Chairman, with hearing the Minister's introductory statement upon which the latter could be questioned, and then the Committee examine, with the Minister and his officials in attendance, all items of the Estimates, leaving Item 1 open, then the Committee would consider the advisability of calling other witnesses.

In amendment thereto, Mr. Hellyer moved, seconded by Mr. Carter,

That immediately following the Minister's statement and examination thereon, 6 witnesses be called, to be nominated by the representatives of the various parties in proportion to their membership on the Committee.

And the question having been put on the proposed amendment of Mr. Hellyer, it was, on a show of hands, resolved in the negative on the following division: Yeas, 5; Nays, 7.

And the question having been put on the proposed motion of Mr. Fairfield, it was, on a show of hands, resolved in the affirmative on the following division: Yeas, 7; Nays, 5.

The Committee proceeded with the examination of the 1960-61 Estimates of the Department of National Defence.

Mr. Pearkes read a statement wherein reference was made to the document entitled "Information for the Special Committee on Defence Expenditures", which was presented to the Committee on Friday, May 13th, 1960. It was agreed that the said document be printed as an appendix to the day's printed record of Minutes of Proceedings and Evidence. (*See Appendix "A"*).

At 10.48 o'clock a.m. the Committee adjourned.

Antoine Chassé,  
*Clerk of the Committee.*

## EVIDENCE

WEDNESDAY, June 1, 1960.  
9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

First of all, with respect to Mr. Hellyer's reference to the cost of maintaining Mitchell aircraft at \$943,573 in 1958-59, it is advised that there were 37 aircraft actively flying during this period. The total hours flown were 17,324.

Then Mr. Hellyer, you also asked for R.C.A.F. publications, and those that were published, particularly, for the first time, in 1958-59.

This is a rather long list. Is it agreeable that we table this?

Mr. HELLYER: If you would just give it to me, Mr. Chairman, it will save time.

The CHAIRMAN: Then, it will not be necessary to table it.

Now Mr. Smith asked a question with respect to Mitchell aircraft. Would you continue, Mr. Smith.

Mr. SMITH (*Calgary South*): Can you tell me if you are aware of any more senior officers, holding air rank, who are flying Mitchell aircraft?

Hon. G. R. PEARKES (*Minister of National Defence*): Mitchell aircraft are used for communication purposes, and senior officers, in the course of their duty, would fly Mitchell aircraft, or any other aircraft in order to keep up their flying time, or would travel as passengers in the Mitchell, as well as any other aircraft.

Mr. SMITH (*Calgary South*): But the point I make—and I will ask the question again: is it not regarded that the Mitchell, in terms of air efficiency, is a fairly hot aircraft, in the sense it needs constant flying in order to be familiar with its characteristics?

I was wondering if the defence department had not thought of something more suitable for senior ranks—those who, perhaps, are slightly over the prime of their flying experience?

Mr. PEARKES: The aircraft is considered airworthy. It is in service. I do not think you can say that an officer can fly one type of aircraft and not fly another, if he is capable of doing it.

Mr. SMITH (*Calgary South*): We have had two accidents.

Mr. PEARKES: Unfortunately, we have had. However, I am not aware that senior officers were actually flying these aircraft.

The CHAIRMAN: Could we withhold any further questions until we get to R.C.A.F., 1960-61?

We have received a letter from Mr. Pearkes, which reads as follows:

When the defence expenditures committee starts its consideration of the estimates of the 1960-61 fiscal year for the Department of National Defence, I would be prepared, if you so desired, to give a brief statement of government policy during which I would point out the commitments that Canada has assumed including United Nations, NATO, and the defence of the Canada-United States region.

After this general statement it might be desirable to have in more detail, a statement on each of these commitments, to be followed by

a question period. If we have this general examination before considering the various items, I think it would make for a smoother consideration of the itemized votes as listed in the estimates.

I would appreciate your comments, please.

We had a steering committee meeting yesterday. I read this recommendation, and all members were agreeable, except for one point—and I might as well bring it up now.

We, in the steering committee, could not decide amongst ourselves one thing, and it was decided to bring it to the open meeting today.

My recommendation is that we should follow this all the way through, and complete our 1960-61 item by item investigation. At that time, we will know approximately how much time we have left for this committee to meet, and then we could assess the question of outside witnesses—how many we should call. That was the point on which there was disagreement at the steering committee meeting. Mr. Winch and Mr. Carter, who represented Mr. Hellyer, felt we should not allow the minister to do this.

Incidentally, I wanted to leave item 1 open. That was my recommendation, in order that we could come back to it at the end.

Mr. Winch and Mr. Carter felt that it would be better for the minister to make his statement, and then stop the proceedings and call in those witnesses that this committee decides are suitable to be called. That was the difference.

Would you like to speak to that, Mr. Winch?

MR. WINCH: I think you have stated it as it was discussed in the steering committee.

I have given considerable thought to the discussion we had in the steering committee meeting. I cannot see any grounds whatsoever for changing my viewpoint. Very briefly, it is this—that this committee has been told to do a certain job and to make certain examinations and, on the basis of our examination, to make a report. Now, if we were to follow the procedure which you have recommended—that is, that we shall hear the minister, as outlined in his letter, with which I completely agree, and then have a question period in which we ask questions of the minister and any others that he has in mind—with which I also completely agree; but I cannot agree then with the procedure for the individual estimates of this present fiscal year because, if we do that, we are going to have to decide yes, no, or abstain on each one of those estimates. We would be doing it then on a basis of not having heard any other opinion from anyone else, if we decide that we should hear them.

To me, it is rather a ridiculous situation to pass through the estimates before you have heard the arguments pro or con, or had a discussion on it.

Also, if you pass the estimates, you are doing to refer them automatically, I take it, to the house, as a report. To me, it is absolutely inconceivable to discuss the estimates in detail, to report them to the house, and then say: we now will hear any outside witnesses in regard to the matter of the policies or the expenditures. I think that is an impossible situation. Also, in addition, as I mentioned yesterday, and again today, that with a rather lengthy experience, both provincially and federally, with committees, once you have passed estimates and have had all the meetings on the accounts, which we have had, and then do the estimates and report them—for anyone to come before the committee and say: let us go back now and hear any witnesses we want to hear, if the committee decides, you are just not going to get the committee to do it because, as far as they are concerned, the job is finished. Because of the pressure they are under—their own work, committee work, and their work in the house, they are not going to want to carry on any other meetings. Even if I am wrong there, and they did, then what would you be questioning? You have already decided on your estimates.



I must strongly oppose the suggestion, and put forward what I think is a reasonable and original proposal—and that is that we hear the minister and anyone he wants to give evidence—that we hear his explanation; that we have the questioning period, and then the committee decide as to whether or not we are going to hear outside opinions and, if so, just whom we are going to hear.

That is my point of view—and I have given this a great deal of thought since our meeting yesterday.

The CHAIRMAN: Mr. Hellyer.

Mr. HELLYER: Mr. Chairman, our view is the same as the one just expressed by Mr. Winch, and the same as the one put forward yesterday in the steering committee, by Mr. Carter.

We believe it is the essence of common sense. We have felt, in the meetings so far, that this committee has been nearly what we believe to be a second rate public accounts committee and, as a matter of fact, we helped in answering a number of questions, which we would have liked to have asked on the accounts of the 1958-59 fiscal period, simply because we wanted to get on with the important business which we felt the committee was formed to deal with—and in this sense, having taken the accounts first, and having left the estimates until later, we felt it was prejudicial to the type of inquiry we would have preferred, even in the past expenditures. We have the same problem again, and we do not want this to become a second rate estimates committee. We felt, all along, that the purpose of this committee—and, certainly, this was the impression that was given to the country at the time it was set up—was that we would have a full and comprehensive discussion of defence policy in all its various aspects.

The CHAIRMAN: That is right.

Mr. HELLYER: So that not only the members of this committee, but the House of Commons, to which we would report, and the public at large, would have the feeling that, at least, we had explored all the various considerations, and that the judgment which had been passed and the policy of the government was based on the fullest of consideration on all points of view. Consequently, we feel it would be worth while—and this, we agree with completely—to hear the minister and any officials he would care to have as witnesses, examine him on his statement, which we look forward to receiving, but that following that we should call, not a large number, but a limited number of outside people, who would not be bound in their answers by any loyalties, except their loyalty to the country at large—their responsibility as citizens. I think it is inevitable, notwithstanding the unquestioned loyalty of civil servants, that when they do work for a specific government they have, in fairness to their government and ministers, set opinions, which are at variance with official opinion. If we only heard the minister and his servants, we would only have the official position in respect to defence policy.

We think we must hear some outside opinion, in order to be confident in our own minds that we have heard all sides of the story. This should be done at the outset, because, it seems to us, futile to consider specific pieces of military hardware—whether Chevrolet trucks are better than Ford trucks, or CF-104's are better than CF-105's, before we decide on the general principle of whether this type of equipment is required. We think it would make more sense to hear the witnesses immediately following the minister and his statement, and the examination on those, even if it meant that we had to have additional meetings to complete our item by item consideration of the estimates before we have to report back to the house.

This is something which will have to be considered by the committee of the whole house, in any event and, I think, far more important, as far as this committee is concerned, is the broad and thorough discussion of defence matters.

The CHAIRMAN: Mr. Fairfield, you were at the meeting. Have you any comments?

Mr. FAIRFIELD: Yes, Mr. Chairman. Mr. Hellyer's remarks seem to be rather inconsistent, at least. In the 1958 estimates, they refused to consider, very seriously, the calling of witnesses from outside.

I can cite a few instances of that.

At page 437 Mr. McIlraith said:

I do not want to open that subject up here, but I do want to make this point clear; if we are only going to discuss policy with these witnesses then we are departing from the practice of our parliamentary system.

And then, later on:

If we start to call these witnesses we will be embarking upon a first class argument in respect of policy matters which were not referred to us. I do not know how we can limit our discussions with these witnesses to matters of the estimates without getting into matters of policy.

At page 441, Mr. Benidickson said:

I believe our first job is to examine the people who are available to us through either the Department of National Defence or the Department of Defence Production.

At page 443, Mr. Pickersgill said:

It would serve no good purpose to bring outsiders, however well qualified. I argued that against every Conservative member on the estimates committee when I was a minister, and I have not changed my views whatsoever, but it would appear that a great many others have changed theirs.

Now, this party seem to have changed their views in the period of two years. At least, Mr. Winch is consistent. However, I think his argument—that if we pass these estimates, then they will be referred to the house and will be closed off—is wrong. Because you stated, right at the start, that item 1 would be held open, in which case, as you said, we could call any witnesses.

To bring the matter to a head, Mr. Chairman, I would like to move that the procedure, as suggested by the chairman—that is, to have the minister go through his statement, and then carrying on with the estimates, leaving item 1 open, until the estimates have been completed—be adopted.

Mr. WINCH: Could I ask a question at this time? Could I ask Mr. Fairfield how he is going to report to the house, without reporting item 1?

Mr. FAIRFIELD: That is what you had intimated—that we would pass the estimates, and would have no chance then, if the estimates were finished in committee.

Mr. SMITH (*Calgary South*): The committee still could leave item 1 open, and the estimates not be reported.

Mr. WINCH: The position that was taken by the chairman yesterday was to the effect that he desired to be able to report the estimates to the house.

The CHAIRMAN: I think that was a misunderstanding, Mr. Winch. What I had in mind was to leave item 1 open until we had an itemized investigation, and then at that time, if you recall, I suggested we take into consideration the advisability of calling witnesses, how many we would call, and so on. I do not see how we could give a report—certainly not a final report—to the house, until we make up our mind, at that time, whom we are going to call, or if we are going to call any—let us say that because, as you pointed out, that is a possibility.

Mr. WINCH: I would like to throw in to this committee this observation. To me, it is something absolutely inconceivable in a parliamentary committee that we reach a decision before we hear the evidence—and that is the procedure which is being suggested. To me it is positively ridiculous.

Mr. SMITH (*Calgary South*): Were that the case, then I also would agree with Mr. Winch. Although I disagree with him, I think he has been reasonable in his presentation.

Mr. Chairman, all we are discussing is a question of timing, and I would hope that we would not involve ourselves in a long procedural wrangle, when we could better use our time to proceed with our work.

What we are asking is that the case for the department be presented, as contained in the estimates. Many of the items are subject to examination and scrutiny by this committee. Then we could proceed with the question of calling witnesses. In regard to the statement made, that this is a second rate public accounts committee; if that is the case, I suggest the member who made the reference has probably reduced it to that. I think the rest of us have enjoyed the examination thus far.

I suggest to you that your recommendation, as such, and the motion moved by Mr. Fairfield, is sound. It is the procedure we followed in the past. There is nothing to prevent us later, if the committee decides, from calling all the witnesses we want.

I make this final point, that if what is concerning the hon. gentleman to my right is correct, that we are going to run out of time, then there is nothing in the world to prevent this committee sitting more often, with a view to getting through our work. I recommend that if, after a period of time, we see that we are not getting on with our work, that we sit every day.

The CHAIRMAN: Are you seconding the motion?

Mr. SMITH (*Calgary South*): Yes.

The CHAIRMAN: Have you a comment, Mr. Lambert?

Mr. LAMBERT: On that point, I think Mr. Smith has raised a very useful argument. How we can intelligently question outside witnesses, without considering the whole of the department's presentation, in the light of the estimates, is beyond me. Otherwise, you are speculating. It would prove difficult to question witnesses on generalized statements which they will advance. I think this can be done only by examining particular areas, and if there are certain areas where you need clarification, or where there is a difference of opinion, you can pick it out; and it seems to me more logical to cover your material beforehand, before you question the so-called independent witnesses.

The CHAIRMAN: Then you know which area he is covering.

Mr. LAMBERT: That is precisely it.

Mr. CARTER: Mr. Chairman, I would like, first of all, to speak to Mr. Fairfield's argument. I think there is an old Latin proverb which states: "Times change, and we change with them."

Mr. FAIRFIELD: Yes, you do.

Mr. CARTER: Just because we take one stand at a certain time—

Mr. SMITH (*Calgary South*): Where are you going to be tomorrow?

Mr. CARTER: It is only a fool who never changes, is what I am told. What we do tomorrow and what we do today depends on the situation in which we find ourselves. The circumstances today are certainly much different from those in 1958.

Mr. FAIRFIELD: When you did not want outside witnesses examined.

Mr. CARTER: Coming back to the question of time, raised by Mr. Smith. Our duties, as members of parliament, are to the people of Canada. It is our



duty to make the best possible use of the time that is available. One of the reasons for the existence of this committee is that we will save time in the house. That is, I agree, an important argument; but there are other considerations too. One is that this committee can do things which the committee of the whole house cannot do: this committee can hear witnesses; we cannot bring witnesses before the committee of the whole house.

If we are going to make the best use of the time available we should put first things first; and, on that basis, we argued that we should have had the estimates before expenditures, because expenditures were past history and estimates are current history. However, we went along with the idea, and we have done expenditures, and taken up time. I am not sure we used that time to the best advantage, if it means that now we are going to be precluded from hearing witnesses.

The CHAIRMAN: The resolution in no way states we are going to be precluded from hearing witnesses.

Mr. CARTER: But the time factor very certainly points in that direction.

As Mr. Winch has said, the people of Canada and all the members of the house are interested in the defence of Canada. We all want to get the best ideas: no matter from where they come, we want to get them and put them together. It would seem to be logical that if we are going to do a good job we should first put priorities on doing the type of thing the committee as a whole, in the house, cannot do. Secondly, we should get as many ideas about our defence, the defence of Canada, and the defence of the western world as it is possible to get.

I think it is possible to ration our time, and if we need more time to do the estimates we should have it. But, certainly, we should ration our time and put first things first. It seems to me, as Mr. Winch and Mr. Hellyer said, that after the minister and his officials have explained the policy on which these estimates are based, then that is the logical time at which to call witnesses and get other ideas, so we will have ourselves better informed in passing judgment on these estimates.

So, I oppose the motion which was made by Mr. Fairfield.

The CHAIRMAN: Before I recognize Mr. Baldwin, I welcome to the committee Mr. Carlin, who is taking over from Mr. Roberge. I hope you will be happy with us.

Mr. BALDWIN: Mr. Chairman, it seems to me that some members have the same degree of impetuosity which characterized them in the original discussion, wanting to rush into an area of discussion when we have not laid the proper foundation. I think for that reason the motion as proposed is a proper one. In answer to what Mr. Hellyer said, for example, on the question of time—if we did not have an opportunity to pass all the items, anyway, it would be considered by the whole house—that is the way I understood him—on the terms of reference of May 2, 1960 we have a duty cast upon us to consider this item by item, the accounts in the blue book.

Secondly, with respect to what Mr. Winch said—that we would be passing items without having obtained the evidence and proof for any particular item—I see no reason why, if there is any special item upon which any member of the committee feels he wants more light shed, that item, as well as the main item, may be held open. We could, if necessary, have more meetings.

I think the procedure, as outlined in the resolution, and as outlined by Dr. Fairfield, is quite proper.

The CHAIRMAN: I would like Dr. Fairfield to check this. The procedure that is suggested by the Chairman is to have the minister go through his statement. Then we carry on with the estimates, leaving item 1 open, at which time the calling of outside witnesses would be considered. Is that your motion?



Mr. FAIRFIELD: Yes.

The CHAIRMAN: That motion was seconded by Mr. Smith. Is there any other discussion?

Mr. HELLYER: Yes, Mr. Chairman, I would like to move an amendment.

Before doing so, and dealing with the point that was raised by Mr. Fairfield, I would like to say it is quite true that the position of our party has changed in the intervening time since 1958. But so have events in the world changed, and with a pace and speed which is unprecedented in the history of military technology. This point was clearly stated from the outset, when we asked for a committee such as we thought this one would be. It was frankly admitted that in the past we had taken a different point of view, but when circumstances seemed to be more comprehensible and more easily understandable in terms of traditional thinking. It was because of the rapid changes in ideas and philosophy, and tremendous advances in technology, that we felt something different was presently required; and in this view, we know, a number of people concur.

As Mr. Carter has so well stated, what it boils down to is a question of first things first. It is not a matter of impetuosity, but a matter of responsibility. It is a matter of what we, as committee members, have a responsibility to do, not only as representatives from the house of commons but also as representatives of the Canadian people.

For that reason, I am not sure what the appropriate place would be at which it should be changed—

The CHAIRMAN: Give me your amendment.

Mr. HELLYER: I would move, seconded by Mr. Carter, that immediately following the minister's statements and the questioning and discussion on those statements, this committee hear six outside witnesses to be nominated by the representatives of the various parties, in proportion to their membership on the committee.

Mr. WINCH: How do I get in on that?

Mr. SMITH (*Calgary South*): Do you get half a one?

The CHAIRMAN: Mr. Hellyer, could you indicate the way you want the six broken down?

Mr. HELLYER: It is something like the redistribution act—proportionate, except that no one shall designate less than one!

Mr. SMITH (*Calgary South*): You did not lose any sleep thinking over that resolution.

Mr. HELLYER: No, none whatsoever, I can assure you.

The CHAIRMAN: On a proportionate basis—among committee members, or among the parties?

Mr. HELLYER: I was thinking about three by representatives of the government, two by representatives of the official opposition, and one by Mr. Winch.

The CHAIRMAN: Have you any discussion on the amendment?

Mr. SMITH (*Calgary South*): It is six of one, and half of another.

Mr. FAIRFIELD: Mr. Hellyer, when he made some remarks before he put forward this amendment, stated that the reason they have changed their minds is because of the rapidity of change in technology, and so on. Actually the witnesses—some of whom have been named already—have had nothing to do with the armed forces for many years. In what event, then, are they capable of giving any real, valuable information to this committee? I, at least, have been consistent. At page 435 of the 1958 estimates I said:

I do not want to cast any reflection on those people who may be called as witnesses, but the fact that they have not any recent research at their fingertips, and the fact that they have made public statements in a more or less derogatory manner of the department seems to indicate that anything that we get out of them may be rather biased and I would be very much opposed to it.

I do not care to discuss the merits or otherwise of the so-called "experts" who might be able to give us some valuable information. I am not against calling them, but I just question, as I did at that time, whether any information they could give us would be up-to-date, even.

The CHAIRMAN: I must interject and state that this is just on the motion, and an amendment on procedure. This is not deciding whether we will or will not call witnesses.

Mr. CHAMBERS: On the point of order, Mr. Chairman, you have raised, the latter half of the amendment specifically asks that witnesses be called at a certain time.

The CHAIRMAN: You are right, Mr. Chambers. I am sorry, Dr. Fairfield. I meant, on the motion.

Mr. CHAMBERS: I would like to say that this seems to me to present an entirely new concept of the operations in a house of commons committee—calling "independent experts", except that they are called by a particular political group. This, to me, is certainly something new. Any political group can take any advice on policy they want from any direction, but it has always been our tradition that the spokesmen for the various parties enunciated their resulting policy.

As far as I am concerned, the policies that in the past have been enunciated by the minister, and those that will be given out in his statement, will be the result of the collective wisdom of our party, together with opinions of such experts as we have consulted.

I have always felt the opposition position was somewhat the same. They can take advice anywhere they want, but the proper spokesmen on the political policy position of the party should be their representatives on this committee.

It would be a real departure from our practice in Canada to have policy discussions by those who have no responsibility. Members of this committee have responsibility, having been elected, and they are responsible for their statements on policy.

It would seem to me to be a really new principle to depart from that, and it is certainly not one which I would be able to support at this time, without a great deal more thought.

Mr. SMITH (*Calgary South*): I could not support the amendment either—

The CHAIRMAN: Just a minute, Mr. Smith. Mr. Carter?

Mr. SMITH (*Calgary South*): I will follow Mr. Carter.

Mr. CARTER: On the point of order, Mr. Chairman, I think Dr. Fairfield's remarks are out of order, because the motion makes no mention of what categories may be called. Dr. Fairfield's remarks are premised on the fact we are going to call retired servicemen. That may or may not be the case, but that is not incorporated in this motion and, therefore, it is out of order.

The government will still be responsible for the policy. All we are asking for is information, and when we have heard that information we will act on the basis of that information we have in judging the estimates. We may make a report on it, but we are not taking the ball from the government, and the government is still responsible for whatever happens in defence in Canada.

Mr. SMITH (*Calgary South*): If this committee decides to call witnesses I suggest the committee makes the decision and the numbers be left open to the committee.

Mr. Carter suggested—and I hope that he is sincere—it is for the purpose of having explanation or understanding of future plans and ideas and suggestions. On the other hand, Mr. Hellyer is, I am sure, not quite as serious as Mr. Carter in the interest of defence—

Mr. HELLYER: Order.

Mr. SMITH (*Calgary South*): —but, as a Liberal, wants to nominate someone to support the suggestions of attack on policy. I conceive it is not—

Mr. HELLYER: That is a highly improper reflection, which I object to strenuously. There is no thought whatsoever of calling anyone to reflect on anybody. The only thought is to get a complete discussion, which we do not feel we are going to get from the minister and his officials because, obviously, when they have been called upon to make decisions their decision has fallen on one side for certain reasons. They are not then—or we do not expect that they are going to give, with equal dexterity, the opposing opinion.

The people we have in mind to ask to come here are well informed. Their political motivation, I know not, but one of them is Dr. Roger Hilsman, of Johns Hopkins university, one of the foremost military scientists of the present time.

Mr. CHAMBERS: Is he a Canadian citizen?

Mr. HELLYER: No, he is not, and would have to come by our invitation, and I do not know whether he would come or not. But he is a person—

Mr. SMITH (*Calgary South*): Mr. Khrushchev, too?

Mr. HELLYER: But he is a person who could give, with great accuracy, the latest thinking in military science, based on up-to-date technological information. I am sure that he would have no political axe whatsoever to grind.

Another one is Dr. Ormond Solandt. He was not only chairman of the defence research board, but has been engaged by this government, subsequently, to do certain types of work of a scientific nature. I am sure his reading and studying would keep him well up-to-date on matters of military science.

The third one we would consider is General Graham. I am sure, being a true army man, he would have no politics, but his leaning would not be against those of the government party, but he would come merely as a retired officer, perhaps—I do not know that he would even come; he might not. But he is a person who could give opinions as to the role of an army in present day military situations, without being bound by the fact that he is a paid servant of the crown.

The CHAIRMAN: Is this correct, Mr. Hellyer? I will deal with your amendment, and then Mr. Forgie and Mr. Winch wish to speak to it.

Immediately following the minister's statements and examination thereon, that witnesses be called on a proportionate basis to the party representation on the committee. Is that approximately it?

Mr. HELLYER: Approximately. It was that they be nominated by the parties.

Mr. CHAMBERS: Six witnesses were mentioned.

Mr. WEBSTER: He has already called four.

The CHAIRMAN: That six witnesses be called on a proportionate basis, or that they be nominated on a proportionate basis?

Mr. HELLYER: That they be nominated on a proportionate basis. This is so there can be no thought whatsoever that the witnesses would be loaded from a political—

The CHAIRMAN: I realize that.



Mr. HELLYER: I am sure they would be loaded with information.

Mr. FORGIE: Am I right in assuming that the minister in his statement will enunciate government defence policy?

The CHAIRMAN: I beg your pardon?

Mr. FORGIE: Am I right in assuming that the minister, when he makes his statement, will enunciate the government defence policy?

The CHAIRMAN: I do not think you are absolutely correct in thinking on that basis. Do you mean the entire government policy, in one statement?

Mr. FORGIE: No, but give us the main points of the government policy—is that the intention of the minister?

The CHAIRMAN: Mr. Minister, would you like to say?

Mr. PEARKES: I am prepared to give the government's defence policy.

Mr. FORGIE: If that is the case, Mr. Chairman, and the minister enunciates the government's policy, do you not think it is right we should have the right to criticize that policy fairly?

The CHAIRMAN: By all means.

Mr. FORGIE: If the government does not come forward with the defence policy, we should be allowed to call people in who would have sufficient knowledge to enable a defence policy to be formulated, because this is the proper forum for doing that.

The CHAIRMAN: The minister said that he was going to outline his policy.

Mr. WINCH: I am not going to mention any names at all, because I think we are not discussing that matter now.

The CHAIRMAN: That is right, Mr. Winch.

Mr. WINCH: We are discussing the course of procedure. All I want to comment on is to answer what Mr. Chambers had to say.

We would not be establishing any new precedent. I have been on committees in this house of commons where members of a committee have nominated witnesses they would like to hear, and they have been heard. That has happened on more than one occasion.

Mr. SMITH (*Calgary South*): On the basis of partisanship.

Mr. WINCH: On the nomination of members that they wanted to hear certain witnesses, and they were called.

Mr. BALDWIN: On this question of time, it seems to me that, possibly—

The CHAIRMAN: This is on the amendment?

Mr. BALDWIN: This is on the amendment. It seems to me that possibly the members who are submitting the amendment are pre-judging this whole issue. We might as well hear witnesses after we have heard the minister's statement and the statement of officials. The statement they may announce might satisfy everyone on the situation, and we may not want to call anyone.

Mr. WINCH: I thought you were pre-judging it.

The CHAIRMAN: Are we ready on the question of the amendment?

Yeas, 5; Nays, 7.

Amendment negatived.

The CHAIRMAN: Are we ready for the question on the motion, gentlemen?

Yeas, 7; Nays, 5.

Motion agreed to.

The CHAIRMAN: Is that not the strangest thing? They were both exactly the same.

Mr. Minister, would you continue as outlined in your May 18 letter, please?



Mr. PEARKES: The remarks that I will make this morning I have put down on paper, as I thought it might be easier for members of the committee to follow, and they will be general in nature, certainly during the first phase of my presentation. Then my suggestion—which, I presume, you are now adopting—is that I will deal in detail with the three major commitments which we have; namely, our commitments to the United Nations, our commitments to NATO, and our commitments to NORAD. Those are the three international alliances that we have. I think it would help if we deal with each one of those separately, and that you ask me what questions you like, as to how we are implementing those obligations.

This morning I will give you rather the background and, if I can, present the thinking of the government which has led to continuing with these various alliances.

I might say that in addition to what I will now state there are these pamphlets which I distributed at an earlier meeting of this committee.

On Friday, May 13, this information booklet was distributed to members of the committee which was intended to be of some assistance during the forthcoming discussion on the 1960-61 estimates of my department. It will be noticed that in the first paragraph of this booklet it is made clear that there has been no basic change in our defence policy as outlined in last year's white paper. I have additional copies here for anybody who wants one.

As outlined in that paper, Canadian defence policy derives directly from our foreign policy and is designed to ensure national security and the preservation of world peace.

The foreign policy of the government is, of course, government policy; and this department has to implement the policy as decided by the government.

These objectives—that is, our national security and the preservation of world peace—are reached through collective arrangements with NATO and the United Nations. The increased range of offensive weapons equipped with nuclear warheads brings the North American continent within the target area in any future war. Consequently it is realized that the defence of this area, Canada, cannot be considered in isolation. The advantage in collective defence within the framework of an alliance such as NATO is that an integrated balanced force can be provided by each member nation concentrating on the provision of those elements which constitute its particular needs and can be most effectively maintained.

During the past few years many fundamental changes have occurred in the concept of war. More than ever before we are in a period of transition in matters of defence. Technological advances have been amazing, new problems face the defence planner daily—tactical atomic weapons, nuclear warheads, rockets and missiles of every description and now even earth satellites. These difficulties are complicated at the present time by uncertainties following the short-lived summit conference and as to the outcome of discussions on disarmament. Canada, however, is dedicated to an unremitting search for the lessening of international tensions and to finding means of bringing about permanent disarmament.

That is a fundamental policy of this government. In fact, I claim that no government has been more sincere in its quest for a workable solution to these problems. We have literally been in the forefront of the disarmament talks.

However, until permanent and controllable means for arms reductions are agreed upon, Canada and her allies must continue their efforts to deter war and to maintain peace through military effectiveness. As the Prime Minister said in an address on May 19, this year, when he broadcast to the nation:

The need of the hour is cool heads, calm decisions and the determination to maintain our defences against aggression, while losing no opportunity to bring about peace through negotiation.

So today, while I state present policies, you must realize that these may be changed almost overnight as the result of subsequent conferences or as further advances are made in weapons technology. Needless to say, a realistic defence policy must be based on as clear and comprehensive an assessment of the threat to security as it is possible to make. Therefore, before discussing our defence policy, I will review very briefly the threat facing Canada and her allies.

Upon to quite recently it appeared that the Soviet Union was endeavouring to create an atmosphere of detente. Nevertheless, the inescapable fact is that Soviet capability to wage war is not diminishing. Premier Khrushchev on a recent occasion had this to say. "Our state"—that is Russia: I am quoting now—"has at its disposal powerful rocket equipment. Almost the entire military air force is being replaced by rocket equipment. We have by now sharply cut, and it seems will continue sharply to cut and even discontinue the manufacture of bombers and other obsolete equipment. In the navy, the submarine fleet assumes great importance . . . our army has such arms as have heretofore been unknown to man. This is why we can reduce our armed forces."

When considering all aspects of the threat, cognizance must be taken of the Soviet cold war objectives. Some of these are: (a) the consolidation of Communist rule at home—that is in Russia; (b) the strengthening of Communist ideology in her Eastern European Bloc; (c) the disruption of NATO and the undermining of Western defence measures generally; and (d) the expansion of Soviet influence in Afro-Asian countries. Thus, the threat to our national security, and indeed the security of the entire Free World, is not only military. It is also political, economic and psychological. To cope successfully with this total threat, Canada must have a total strategy within which all elements—the military, the political, the economic and the psychological—are closely coordinated and in proper balance.

To indicate the changing emphasis which is placed on the importance of fighting this cold war on an economic front, I would like to call attention to the amounts of money which have been extended in what is frequently called aid to underdeveloped countries. The amounts which we have contributed to help these countries in 1956-57, were in round figures \$38 million and this year they are now over \$70 million. This gives you an indication as to how we are trying to help the other countries on an economic and psychological front.

The Soviets would not, I believe—and this belief is based on the best evidence I possibly can get—deliberately take any action at this time which in their opinion would involve a serious risk of provoking a general war. Nevertheless, relaxation of western defence efforts, without adequate safeguards, or any division within NATO, might increase the possibility of Soviet infiltration within or outside the NATO area.

What then is the situation today vis-a-vis the free world and the communist states? The combination of the development of the nuclear bomb with new and faster means of delivery has created what has been described as a nuclear stalemate. In other words, the communist world recognizes that a nuclear war with the west would only end in mutual destruction. Therefore, a sudden and planned attack is unlikely for the time being.

A third world war could originate, I suggest, as a result of three situations. The first one which should be mentioned is the possibility that hostilities might be started if the present balance of military strength changed. The second potential danger lies in Russia obtaining a technological breakthrough such as the development of means of destroying or diverting missiles in flight. No such anti-missile weapon has as yet been produced. The third danger area is the outspreading of a local war. We must keep in mind that there is always the chance of a war breaking out by misadventure or revolution. There is the possibility that global war would follow as a result of any such uprising.

It is the knowledge that if one of these three things happen—a substantial change in the balance of strength, a technological breakthrough, or an enlarging of a local war—North America, in all probability, would be attacked.

The Soviet bloc has between five and six million men under arms. Although reductions have been announced, the advent of new weapons, conventional and nuclear, have increased the firepower to manpower ratio. In fact, it must be assumed that the Soviets now have atomic weapons suitable for tactical ground and naval employment, as well as a wide range of aircraft and missile delivery systems. As far as ICBMs are concerned, the Russians have, undoubtedly, some such missiles operational and within the next few years they will probably have several hundred available. As their missile capability increases, less and less reliance will be placed upon their bombers. Their submarine fleet is impressive consisting of more than 400 such vessels; some of these may already be equipped with ballistic missiles.

The point I would like to emphasize here is that while reductions have been made in manpower, such reductions have not been made in the interests of disarmament but rather because the Soviet have developed more powerful and devastating weapons.

Experience during the past half-century has taught us that no one country by herself can stand up against an aggressor. In military matters we are quite incapable of providing everything that we would wish to have in the way of defence. Indeed, as the Prime Minister has reiterated: "While there are some who contend that we should provide our defence by ourselves that is impossible for any nation in the free world". Consequently, Canada and other like-minded nations have resorted to the only solution of such a problem, namely participation in alliances. Thus, Canada has entered into certain agreements with other nations to ensure national security and the preservation of world peace.

Realizing then, that unilateral action in defence is neither feasible nor sensible, joint alliances are of necessity the only solution. Such action entails responsibilities that are comparatively new to a country such as Canada. Again, for the first time in peace foreign military personnel are on our soil. We are, of course, not alone in this respect. United States forces are here as they are in far greater numbers in the United Kingdom and in other European countries. We in turn maintain military establishments in the United States, the United Kingdom, France and Germany. The military contributions of other NATO allies in Europe are not necessarily located in their own countries. They are situated where, by common agreement in the alliance, they are making the maximum contribution to the overall deterrent.

Therefore, we must not consider our defence effort in isolation but, rather, one should look at the general effectiveness of the defensive alliances to which we make a contribution commensurate to our ability and without placing an undue strain upon our manpower and financial resources. Since the NATO concept is based on the prevention of war—I underline that; that is the whole underlying intention of the North Atlantic Treaty Organization, that rather than try to win a war they must prevent a war because we know that it means really mutual destruction in many parts of the alliance and the world—as long as an act of aggression fails to materialize, then our efforts and those of our allies can be considered successful. We have succeeded in deterring war. While the cost of this form of insurance is heavy, I think Canadians as a whole support the commitments we have undertaken and are undertaking and would wish we would continue to play our part and pay our share rather than to withdraw into a shell of isolation, letting others no better off than us carry the burden required to ensure peace.



The following defence commitments, therefore, have been accepted by Canada:

- (1) the provision of naval, air and ground forces for the defence of the Canada-United States region;
- (2) contributions to the collective defence and deterrent forces of NATO in Europe and the north Atlantic;
- (3) provision of forces to support the United Nations organization in maintaining its peaceful aims.

It might be useful at this stage for the committee to discuss these commitments one by one and perhaps a start could be made today with our contribution to the United Nations. Canada contributes service personnel to the truce commissions in Kashmir, Palestine, Indo-China and to the emergency forces in Egypt. In all we have 90 officers and men on the truce commissions and approximately 850 army personnel and 80 air force as part of the emergency force in Egypt.

In Egypt the Canadian army headquarters is at Gaza with the base camp at Rafah. The army is equipped with light arms suitable only for personal protection and Ferret scout or reconnaissance cars which are also lightly armed. The air force have three Dakota and four Otter aircraft at El Arish. The cost of maintaining the Canadian contingent is paid in part by Canada and in part by the United Nations. In general our share includes pay and allowances, cost of initial equipment, transportation and freight costs for personnel and equipment within Canada; that is the moving of personnel from wherever they may be stationed to the sea port. The estimated amount for 1960-61 is \$5 million. It is rather difficult to draw a hard and fast line as to the exact contribution.

In addition, we maintain in Canada a specially equipped air transportable battalion ready to move anywhere in the world should the need arise. I might add that that means the troops have to be specially inoculated so that they are ready at short notice to go into a tropical country if necessary and no delay would be caused in having to have them inoculated. So they are kept in a ready state at all times. Also the personnel of that particular unit includes a lesser number of very young men who would not, on account of their age, be allowed to leave the country. This is a complete unit ready to move. All its transport is organized so that the transport can be put into aircraft which are available. In addition to that, other regular forces are available in Canada if any further contribution to a United Nations effort is required to prevent the spread of any local war. We feel, in the first instance, the United Nations might ask us to make a small contribution very quickly in much the same way as we are making a contribution of a limited number of men—approximately a battalion—to the UNEF forces in Egypt. That is why we have ready to move at very short notice this battalion which is located in London. The aircraft of the air transport command are located at Trenton.

The CHAIRMAN: By London I assume you mean London, Ontario.

Mr. PEARKES: London, Ontario.

I might say that this government has recommended on more than one occasion the establishment of an international police force under the auspices of the United Nations. In fact our Prime Minister prior to the convening of the United Nations conference in San Francisco in March of 1945 advocated the need for the establishment of such a force and in recent years has renewed his support and that of the present government for such a move.

We attach importance to having forces in being so that they are readily available for these peace preserving missions. We have announced recently the purchase of various forms of transport aircraft which will greatly increase



our capability for these various missions. I would mention the medium range transport, known as the CC-109, the long-range transport aircraft known as the CC-106 and our most recent purchase of four C-103B heavy transport aircraft which can handle much of the heavier army equipment and can operate on rough terrain with relatively short take-off and landing runs.

Although it really does not come into the matter of defence, at this stage I might mention how our transport command is assisting in Chile. Not only are we sending supplies on the long hop from here to Santiago but, because of the heavy transport aircraft being used by the United States in bringing large quantities of supplies, there are not sufficient medium aircraft such as our North Stars available to ferry those supplies from Santiago to the actual stricken areas. So you want a combination of heavy transport aircraft such as perhaps the Globemasters of the United States, and then you want medium range lighter aircraft which can go into less developed areas where the airfields are not as highly developed. That is where we feel the C-130B's are invaluable.

It might be of interest to give some of the characteristics of these new aircraft. The CC-106 has a range of 4,700 nautical miles or 5,400 statute miles, a normal cruising speed of 370 mph and a capacity to lift 134 passengers 4,600 statute miles or 52,800 pounds of freight 2,900 statute miles. The CC-109 has a range of 1,960 statute miles, a normal cruising speed of 300 mph and a capacity to lift 40 passengers or 8,800 pounds of freight 1,150 statute miles. The C-130B has a range of 4,000 statute miles, a normal cruising speed of 345 mph and a capacity to lift 25,000 pounds for 2,900 statute miles or 92 passengers for 3,350 statute miles. The cost of these aircraft are given on page 13 of the information booklet which has already been made available to the members of the committee. Most of these aircraft will be completed and delivered to the services by the end of the current fiscal year and with their acquisition we will have the capacity to lift in one long range air operation the battalion I have already mentioned equipped with light arms, jeep transport and limited rations.

The CHAIRMAN: Thank you, Mr. Minister.

Gentlemen, before we proceed with anything else I feel that this information booklet should be made a part of the record. Is it agreeable we have it printed in the record?

Agreed. (See appendix "A")

The CHAIRMAN: We have a few minutes left. Are there any questions on Canada's commitments to the United Nations? Are there any broad questions before we get down to items.

Mr. SMITH (Calgary South): I would like to ask two questions if I may. Perhaps this information is not available, Mr. Minister, but I would like some comparative figures of Canada's contribution with those of other member countries of the United Nations. Offhand can you tell us roughly what these are? You have given the Canadian figures.

Mr. PEARKES: I do not think I am at liberty to give the figures and contributions of other countries. We are examining our own Canadian estimates and other countries consider that their contributions are classified. I would not be in a position to give the detailed information. I think I could get you the general information. I think I could get you the total strength of the UNEF force.

Mr. SMITH (Calgary South): That is satisfactory. The whole purpose of my question is this: I would like to know, in relation to the amount of money we are spending, exactly what is Canada's contribution towards this total force. I am sure the United Nations publicizes these figures. I will leave that, Mr. Chairman.

Mr. PEARKES: I can tell you this, that with regard to UNEF forces, we are the second largest contributor.

The CHAIRMAN: Do you wish anything else, Mr. Smith, at a future meeting?

Mr. SMITH (*Calgary South*): If the information is available as to the total force, and therefore the percentage of Canada's contribution, we could easily draw a conclusion.

My second question is this. You mentioned, Mr. Minister, the fact that you have additional forces available for United Nations work. Then in the next paragraph you make reference to the position of the Prime Minister and the government and, of course, others, and the suggestion of maintaining or sustaining a police force for the United Nations. Do we draw the conclusion that if such a force was ever developed, the units—we have not mentioned their size—that are available in London would be that part of the contribution that we would make to such a force?

Mr. PEARKES: I am afraid that is pure speculation. But that is a force that we are, of Canada's own free will, holding available and ready now.

If an agreement were reached, it would be impossible for me at this time to say whether Canada would be asked to make a larger, or smaller, contribution. But we feel that that is a reasonable force to hold. It might be, of course, that a force of a different nature would be required; but—

Mr. SMITH (*Calgary South*): It would depend on the complex of what was required?

Mr. PEARKES: It would depend on the agreement that was reached, if ever such a police force is set up. But, as you will realize, no action has been taken by the United Nations themselves to establish such a force.

Mr. SMITH (*Calgary South*): I appreciate that. It was just the relationship of the two paragraphs. Thank you, Mr. Chairman.

The CHAIRMAN: Might I suggest, as homework before we come back on Friday morning, that we go over the statement the minister has just made and divide the questions down into United Nations, NATO and NORAD. If there are further questions—and I am sure there will be—on United Nations, if it is agreeable, could we withhold them until Friday morning; or do you wish any evidence brought on Friday? Does any person wish any evidence brought on Friday on United Nations?

Mr. HELLYER: Mr. Chairman, the minister said he had additional statements in respect to each of these categories. Could we hear those first?

Mr. PEARKES: I will make a brief statement regarding our commitments to NATO before we go to that, and a brief statement regarding our contribution to the defence of North America.

The CHAIRMAN: I think the statement on United Nations was included in the last part of this, was it not?

Mr. PEARKES: That is right. I have no more to add in a general statement regarding our commitments to United Nations.

Mr. HELLYER: Is it your intention, Mr. Chairman, that we should confine our remarks to the United Nations at the beginning of the next sitting, before we go on with these other matters?

The CHAIRMAN: That was my suggestion. But I thought, to make sure that we do not jump ahead, perhaps you would group your questions under the three heads, first United Nations, second NATO, and third NORAD. Then we will take them in that order, if that is agreeable to everybody, and I am sure it is. Agreed?

Agreed.

The CHAIRMAN: Then we will meet here next Friday morning, gentlemen, at the same time.



**Information  
for the**

**Special Committee on Defence Expenditures  
1960**

**HON. G.R. PEARKES, V.C.  
Minister of National Defence**

**May, 1960  
OTTAWA**





# INFORMATION FOR THE SPECIAL COMMITTEE ON DEFENCE EXPENDITURES 1960

## Introduction

1. Canada's defence policy was outlined in some detail in the Report on Defence issued in April 1959. In the intervening months since then there has been no basic change in that policy and, in consequence, it is intended that this paper should be in the form of an aide memoire to the Committee indicating steps that have been taken in recent months to implement this stated defence policy.
2. It is recognized that through the Department of External Affairs serious efforts have been and are being made to bring about concrete progress in international discussions leading to effective disarmament. While supporting this ultimate goal, Canada has not abrogated the commitments undertaken in the NATO defence alliance or the support given to the United Nations Peace Forces and Truce Commissions.
3. No one nation can afford an unilateral defence. Canada's defence effort must not be viewed in isolation but rather as a contribution to the combined deterrent of the Western Alliance. Our defence expenditures are not providing complete protection but in combination with others, they are contributing to the over-all effectiveness of an insurance against possible aggression.
4. The changing nature of the air threat from manned bombers to missiles of various ranges coupled with the rapid technological advances in weapons development have posed problems in ensuring that the Canadian armed forces possess the required equipment to carry out the tasks to which they are committed. Development costs of new weapons systems and the fact that advances in science have necessitated the cancellation of defence projects before completion, have called for a flexibility in policy with regard to the procurement of new equipment. However, within financial limitations, it is considered that decisions taken within the past year for the acquisition of new equipment

have maintained the contribution Canada is making to the overall deterrent against military aggression.

## Royal Canadian Navy

5. The Royal Canadian Navy now has more ships and men at sea than at any other period in peacetime. During the past year the seven destroyer escorts of the St. Laurent class were transferred to the West Coast while the seven Restigouche type form part of the fleet operating out of Halifax, Nova Scotia. The keels of five of the repeat Restigouche destroyer escorts - McKenzie, Saskatchewan, Yukon, Q'Appelle and Annapolis - have been laid and the construction on the sixth - Nipigon - is expected to start in July 1960. In order to refuel and resupply the fleet at sea and thus give it a greater operating capacity a tanker supply ship is being obtained.

6. With the transfer of the St. Laurent ships to the West Coast it is necessary to provide a submarine for use as a training target. In this regard, negotiations are being undertaken for the loan of a conventional United States submarine. It is intended that this submarine will be manned by personnel of the Canadian Navy. In December 1959 a contract was let through the Department of Defence Production for the procurement of Variable Depth Sonar Equipment. This device developed jointly by the Navy and Defence Research Board scientists of the Naval Research Establishment Dartmouth, Nova Scotia will greatly increase the detection capabilities of anti-submarine ships.

7. Converted into repair ships the former maintenance vessels Cape Scott and Cape Breton were returned to service in 1959 and are now stationed on the East and West Coast respectively, thus giving increased mobility to the fleet by providing repair facilities for ships out of home ports.

8. During the year additional CS2F tracker aircraft have been delivered. These are of an improved type having an advanced radar, better submarine detection and tracking capability and an advanced automatic flight control system.

## Personnel

9. Strengths - Regular 20,675, Reserve 3,311.

## Canadian Army

10. In the fall of 1959 three of the five major units of the Canadian Infantry Brigade Group in Europe were rotated. This was an initial step in the planned rotation of the Brigade on a three year, rather than a two year, tour basis. Commencing late in 1960, approximately one-third of the Brigade Group will be rotated annually.

11. An announcement was made in March 1960 that authorization had been given for the procurement of the 762 mm rocket and Honest John launcher in lieu of the Lacrosse surface-to-surface missile for the infantry forces in Europe. This missile, capable of having either a conventional or nuclear warhead, has also been adopted by several member nations of NATO. Provision is made in the 1960-61 Estimates for improving the firepower of the Centurion tank. 105 mm guns will replace the 20 pounders with which this tank is now equipped.

12. The Army is also procuring sufficient numbers of the C42 radio set for both field use and survival operations.

13. The development of an armoured tracked vehicle, the Bobcat, continues satisfactorily and the project is now at the stage where engineering work will be completed later this year.

14. Delivery of the C1FN rifle has been made in sufficient quantity to re-equip both the Regular Army and Militia units. A new 9 mm sub-machine gun has also been issued to meet the partial operational requirements of the Regular Army. Additional quantities of this weapon are on order.

15. Duties and responsibilities assigned to the Army in survival operations became effective on September 1, 1959. On that date the National Survival Attack Warning System commenced operations on a permanent 24-hour a day basis. Orders



have already been placed for light rescue equipment and radiac instruments for the mobile units and sufficient quantities for training have now been delivered. By the end of 1960 most radiac and rescue items will be available to meet both training and operational requirements.

16. The Militia has been issued with sufficient equipment to start training in survival operations. Additional rescue equipment will be provided this year in order that the Reserve units can perform their full survival role.

## Personnel

17. Strengths - Regular 47,185, Reserve 40,010.

## Royal Canadian Air Force

18. In accordance with a request from NATO authorities, 8 squadrons of the No. 1 Air Division in Europe are to be re-equipped with the CF104 strike reconnaissance aircraft. Preparations for the production of this aircraft in Canada are now underway and it is anticipated that it will enter operational service in 1961.

19. Delivery of the Argus long-range anti-submarine aircraft will be completed this year. Neptune maritime aircraft have been transferred to the West Coast and all Lancaster aircraft used in Maritime Air Command have been withdrawn from service.

20. In addition to the CC106 long-range transport and the CC109 medium range transport now on order, procurement action has been taken for four C130B aircraft, a medium range heavy cargo carrier and ten CSR110 amphibious aircraft for search and rescue duties. Twenty-seven Otter aircraft are also being obtained for the Auxiliary Air Force in order that this force can carry out operations in support of military and civilian requirements.

21. Work has commenced on the Bomarc installations in



Canada and at the Sage Communication Centre near North Bay, Ontario. Survey and acquisition of land for additional heavy radars and gap fillers is also proceeding.

22. Effective June 1960, the RCAF Ground Observer Corps located south of the 55th parallel is to be disbanded owing to the increasing capability of the Pinetree radar system to provide complete and instantaneous information on aircraft flying in that region. Observation posts north of the 55th parallel will continue to be maintained in order to supplement the Distant Early Warning and Mid-Canada radar lines and to provide assistance in search and rescue operations.

23. In August 1959 an IBM 705 computer was installed at Air Materiel Command Headquarters to meet an urgent requirement in the management of the materiel resources of the RCAF.

## Personnel

24. Strengths - Regular 51,737, Reserve 3,792.

## Defence Research Board

25. The role of the Defence Research Board assumes increased importance in order to develop and maintain a high level of scientific research and a comprehensive exchange of scientific information.

26. Work in the anti-intercontinental ballistic missile field has increased during the past year. Joint programmes have been established at both the Canadian Armament Research and Development Establishment and the Defence Research Telecommunications Establishment with the U.S. Army and USAF and the National Aeronautical Space Administration. The techniques and facilities developed at CARDE in the basic studies of missile models in hypersonic flight have been applied by the U.S. Army Rocket and Guided Missile Agency to specific problems of detection and discrimination of intercontinental ballistic missile warheads. The DRTE, in co-operation with NASA, is engaged in the design, fabrication and

instrumentation of a satellite to be used as a research tool to collect and transmit information in the ionosphere from the upper side.

27. The Prince Albert Radar Laboratory was officially opened in June of 1959 and is now operating on a joint programme with the USAF to gain further scientific data on the auroral phenomenon and its effect on radar transmissions.

28. At the Suffield Experimental Station an active programme is under way to study the effects of shock and blast using multi-ton high explosive detonations. The purpose of the programme is to bridge the gap in knowledge between conventional high explosive detonations and detonations of nuclear weapons.

29. Because of the responsibilities given the Canadian Army in civil defence, research into survival problems has been added to other projects already in hand on behalf of the Army.

30. Co-operation with NATO is increasing and bipartite agreements are being negotiated with NATO nations for an exchange of defence science information in areas of mutual interest. Agreements with Norway and the Netherlands are in the final stages of negotiation. Informal discussions with France and West Germany are under way with a view to formal negotiations at a later date.

## DEFENCE APPROPRIATIONS AND EXPENDITURES

### Defence Appropriations

31. Total appropriations requested for 1960-61 amount to \$1,593,272,266 as compared with \$1,680,194,006 requested in 1959-60, a decrease of \$86,921,740.

32. In addition to the appropriations requested for 1960-61 the estimates provide for an expenditure of \$3,000,000 from the Replacement of Materiel Account operated under Section 11 of the National Defence Act. This compares with \$15,000,000 provided from the same source in 1959-60.

33. Of the total decrease of \$86,921,740 in 1960-61, \$15,990,424 applies to the Operation and Maintenance votes and \$70,931,316 applies to the capital votes, i.e. Construction or Acquisition of Buildings, Works, Land and Major Equipment.

34. The tables on pages 15 and 17 show a comparison of the cash provision in 1960-61 with that of 1959-60 as well as the estimated expenditures in the latter year and the actual expenditures by fiscal year back to 1951-52. Comparative figures are shown by individual Service and by standard cost categories.

### Defence as a Proportion of Total Expenditures

35. Following Korea, defence expenditures climbed to a peak in the fiscal year ending March 31, 1953, continued at a level in excess of \$1,700,000,000 during the next four years of heavy expenditures on both equipment and construction and subsequently have been reduced to a level below \$1,600,000,000. The following table shows the relationship between total defence and budgetary expenditures in recent years.

	Defence Budget Expenditure <u>(\$000)</u>	Total Budget Expenditure <u>(\$000)</u>	Defence as a % of Total	Net Cash Defence Outlays <u>(\$000)</u>
1951-52	1,415,474	3,732,875	37.9	1,389,577
1952-53	1,882,418	4,337,276	43.4	1,814,337
1953-54	1,805,915	4,350,522	41.5	1,784,466
1954-55	1,665,969	4,275,363	39.0	1,717,299
1955-56	1,750,112	4,433,128	39.5	1,750,898
1956-57	1,759,426	4,849,035	36.3	1,806,934
1957-58	1,668,463	5,087,411	32.8	1,695,872
1958-59	1,424,741	5,364,040	26.6	1,661,830
1959-60	1,500,652	5,706,800	26.4	1,512,209

	Defence Estimates <u></u>	Total Estimates <u></u>	Defence as a % of Total	Net Cash Defence Outlays <u></u>
1960-61	1,593,272	5,740,200	27.8	1,596,272

36. On a per capita basis, defence expenditures in the peak year 1952-53 amounted to \$129 and currently in 1960-61 are estimated at \$89. This compares to current defence expenditures in the United States on a per capita basis of \$227 and in the United Kingdom of \$88. In relation to gross national product, expenditures in 1952-53 were 10.5% and in 1960-61 are expected to be 4.4%.

37. Operating and maintenance costs have increased during most of this period and only in the last two years has it been possible through determined efforts to reduce them. In 1960-61 the operating and maintenance votes are some \$16,000,000 below the estimates for 1959-60. The main reduction in defence spending has been in the capital votes. Since Korea, capital outlays on construction totalled, to the end of the last fiscal year, \$1,374,997,000. This substantial expenditure has provided the operational requirements of the forces including major installations such as the Pinetree system and the Mid Canada Line as well as extensive modern facilities for living accommodation for both married and single personnel, warehouses



and storage depots, ammunition dumps, workshops and training schools and facilities. While there continue to be significant operational construction requirements, notably those arising from the cost sharing programme with the United States related to improvements in the Pinetree system, the provision of Sage and the Bomarc bases and those related to the introduction of new heavy aircraft such as the Argus, the heavy needs for new construction of permanent plant have been met. Construction estimates for 1960-61 total \$98,352,000 which compares with peak construction expenditures in 1952-53 of \$266,399,000, a reduction of \$168,047,000. Expenditures for equipment during this period for the three Services have totalled \$4,627,315,000. The forces during this period have been substantially re-equipped and in addition expenditures for equipment produced directly for mutual aid have totalled approximately \$123,000,000. Equipment purchases increased rapidly after 1950 to a peak expenditure of \$765,088,000 in the fiscal year 1953-54. In this peak year expenditures for ships totalled \$93,323,000, for aircraft \$410,301,000 and for ammunition \$73,491,000. In subsequent years expenditures for equipment have decreased to the current estimated level in 1960-61 of \$298,984,000, reflecting the slower pace of re-equipment as new equipment wears out or becomes obsolescent following the initial build up. This in turn has had the effect of substantially reducing equipment available from service stocks for mutual aid purposes and has been a contributing factor in the reduction in the mutual aid programme.

38. Some other considerations are worth noting in relation to the current level of equipment expenditures. Under the programmes relating to improvements to the Pinetree System, Sage and Bomarc for which Canada has a cost-sharing agreement with the United States, equipment estimated at a cost of \$250,000,000 will be provided as the United States' share. All Canadian expenditures on this programme come under construction and do not therefore affect the level of equipment outlays. Rapid technological developments in advanced weaponry also have an impact on equipment expenditures. The development costs associated with these weapons systems are so great that they are by and large beyond the reach of the Canadian

defence budget. It has been clearly prudent to proceed with caution in the selection of new equipments and the undertaking of heavy commitments for equipment during this period. The CF-105 and its armament, had it been continued into production, would have involved additional expenditures in the order of \$1,000,000,000 and expenditures in the fiscal year 1960-61 in excess of \$300,000,000.

## Distribution of the Defence Budget

39. The following table sets out the distribution of the defence estimate by the direct expenditures attributable to the main areas of the defence programme under Canada's collective defence arrangements together with the expenditures for training, logistic support, etc., supporting all of these efforts:

<u>Function</u>	<u>Amount (\$ millions)</u>	<u>% of Defence Budget</u>
<u>1. Contribution to NATO:</u>		
SHAPE	206.9	13.0
ACLANT	166.7	10.5
2. Defence of Canada-US		
Region including all Army field forces in Canada	357.3	22.5
3. Training Forces	205.3	12.7
4. Logistics Support Forces	296.3	18.6
5. Command and Administration	98.1	6.2
6. Reserves and Cadets	61.6	3.9
7. Research and Development	44.7	2.8
8. Search and Rescue	14.5	.9
9. Pensions	60.2	3.8
10. Mutual Aid	14.8	.9
11. Various and Unallocated	66.8	4.2
<hr/>		
Total	1,593.2	100.0
<hr/>		

## Construction, Equipment and Development

40. Collectively these votes amount to \$394,336,346 in 1960-61, slightly less than 25% of the total appropriations requested. The reduction from the 1959-60 estimates is \$70,931,316. Provision is made in these votes for construction including land acquisition, procurement of major equipment and development. The distribution of funds under each of these headings in the 1960-61 and 1959-60 estimates is as follows:

	1960-61 Estimates <u>(\$000)</u>	1959-60 Estimates <u>(\$000)</u>	Net Change <u>(\$000)</u>
Construction including			
Acquisition of Land	98,352	120,031	- 21,679
Major Equipment			
Procurement	281,768	323,672	- 41,904
Development	<u>14,216</u>	<u>21,565</u>	- <u>7,349</u>
	<u>394,336</u>	<u>465,268</u>	- <u>70,932</u>

## Construction

41. Provision is made for a continuation of expenditures on the Sage-Bomarc-Heavy Radar programme accepted by Canada under cost-sharing arrangements with the United States. Expenditures on this programme in 1960-61 are estimated to be \$21,422,000, of which \$7,850,000 relates to Sage, \$8,000,000 to the construction of two Bomarc sites and \$5,572,000 to Heavy Radar sites including gap fillers. Continued development of the Maritime bases at Greenwood and Summerside associated with the Argus aircraft involve estimated expenditures in 1960-61 of approximately \$7,500,000. Provision for expenditures related to the transfer of Transport Command to Trenton and the introduction of the CC106 aircraft approximates \$3,000,000.

## Equipment

42. Provision is made under ship construction for the six anti-submarine escort vessels of the Repeat Restigouche class in the amount of \$30,700,000. The amount of \$1,500,000 is provided for the start of the construction of the tanker supply ship. Provision has been made for costs-associated with the loan of the submarine from the United States in the amount of \$900,000.

43. Production of the last of a total of 100 CS2F tracker aircraft for the Navy will take place during 1960-61, final deliveries being scheduled for October 1960. Estimated expenditures in 1960-61 are \$1,120,000 as compared with \$21,500,000 provided for these aircraft in 1959-60.

44. Provision for the variable depth sonar in the amount of \$1,000,000 to cover the estimated 1960-61 costs has been made.

45. The improvements to the firepower of the Centurion tank are estimated to cost \$6,000,000, for which \$482,000 has been provided in 1960-61. Estimates for the C42 radio set in 1960-61 are \$1,585,000 of a total estimated cost of \$11,328,000. Provision for procurement of the 7.62mm FN Rifle C1 and C2 in 1960-61 is \$2,598,000 and for the 9mm sub-machine gun \$914,000. Ammunition for these weapons is provided for in the amount of \$6,544,000. The provision for equipment for the survival operations of the Army amounts to \$7,850,000. The estimated cost of 762 mm rockets and launchers is \$2,800,000 but no expenditures are expected or provided for in 1960-61.

46. Completion of the development of the Bobcat is estimated at \$644,000 for which provision has been made in the 1960-61 estimates.

47. With regard to the production of the CF104 aircraft, approximately \$27,000,000 was expended to the end of the last fiscal year and expenditures of \$75,000,000 are estimated in 1960-61 for which provision has been made in estimates.



Provision for other aircraft purchases for the RCAF include:

CSR110 - search and rescue aircraft, delivery to be completed in 1960-61, at a total cost of \$13,391,000 of which \$7,000,000 remains to be spent in 1960-61.

CC109 - medium range transport aircraft, delivery to be completed in 1960-61, at a total cost of \$23,590,000 of which about \$662,000 remains to be liquidated in 1960-61.

Argus - long range maritime reconnaissance aircraft delivery to be completed in 1960-61 at a total cost of \$226,675,000 of which about \$6,000,000 remains to be liquidated in 1960-61.

CC106 - long range heavy transport aircraft, at a total cost of \$120,000,000 of which about \$88,000,000 is already liquidated with estimated expenditure of \$30,000,000 in 1960-61.

C130B - medium range heavy transport aircraft to be delivered in 1960-61, at a total cost of \$14,000,000 of which about \$7,000,000 remains to be liquidated in 1960-61.

Otter - aircraft for Auxiliary squadrons, delivery to be completed in 1960-61, at a total cost of \$3,956,000 of which about \$2,000,000 remains to be liquidated in 1960-61.

48. In the field of electronics the RCAF will continue with the re-equipment of airborne and ground telecommunications installations with ultra high frequency equipments as well as modern air and ground navigational aids. Provision is made for expenditures in 1960-61 of approximately \$7,000,000 on ultra high frequency equipments and approximately \$5,000,000 on TACAN installations both air and ground. In addition provision is made for expenditure in 1960-61 of approximately \$1,500,000 on airborne doppler navigation equipment.

## Mutual Aid

49. The total Mutual Aid programme for 1960-61 amounts to \$54,800,000 of which the appropriation requested to meet direct charges is \$14,800,000. The comparable amounts in 1959-60 were \$90,000,000 and \$21,850,000 respectively. The decrease in the overall programme is in a large measure due to a progressive diminution of available items of equipment from Service stocks which are useful to our NATO allies as Mutual Aid. The value of such equipments has decreased from an estimated \$60,144,000 in 1959-60 to an estimated \$35,000,000 in 1960-61. Moreover the volume of NATO Aircrew Training continues to reduce from an estimated \$8,006,000 in 1959-60 to an estimated \$5,000,000 in 1960-61. As regards direct charges, the decrease from \$21,850,000 in 1959-60 to \$14,800,000 in 1960-61 is due to a reduced requirement for cash to meet our obligations in respect of contributions to infrastructure and the military budgets of NATO.

# DEFENCE EXPENDITURES

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## DEPARTMENT OF NATIONAL DEFENCE Comparison of Expenditures by Fiscal Year

(Thousands of Dollars)

DND Budgetary Components	1951-52 Expendi- tures	1952-53 Expendi- tures	1953-54 Expendi- tures	1954-55 Expendi- tures	1955-56 Expendi- tures	1956-57 Expendi- tures	1957-58 Expendi- tures	1958-59 Expendi- tures	1959-60		1960-61 Estimates
									Appropri- ations	Expendi- tures *	
Navy (Cash Disbursements)	182,371	260,296	289,031	304,166	340,808	326,699	294,989	272,960	287,492	261,590	271,301
Army (Cash Disbursements)	473,066	503,390	436,376	454,391	461,438	459,452	424,654	432,853	448,853	400,793	421,297
Air (Cash Disbursements)	650,525	912,710	914,984	814,733	798,248	863,100	813,768	797,466	811,304	721,528	767,929
Defence Research Board	18,376	23,782	23,568	26,329	31,547	24,095	25,242	26,617	29,519	28,458	30,480
Development	17,018	19,207	17,239	23,522	32,811	45,228	53,424	47,743	21,565	11,685	14,216
Mutual Aid, Infrastructure and NATO Budgets	129,935	246,355	300,228	260,022	174,966	133,553	118,464	70,711	90,000	49,150	54,800
Administration, Pensions, etc.	41,772	48,681	56,812	57,010	59,747	66,239	70,149	70,777	74,611	73,495	76,249
DEDUCT:											
(a) Mutual Aid Transfers of Equipment from Service Stocks		40,042	114,604	127,504	38,231	63,679	78,399	50,551	60,144	30,000	35,000
(b) NATO Aircrew Training	48,552	104,628	71,340	52,890	51,056	47,753	26,418	6,746	8,006	4,400	5,000
Charges to Special Accounts	49,037	cr 12,667	46,379	93,810	60,166	47,508	27,410	237,089	15,000	11,557	3,000
BUDGETARY EXPENDITURES	1,415,474	1,882,418	1,805,915	1,665,969	1,750,112	1,759,426	1,668,463	1,424,741	1,680,194	1,500,652	1,593,272

\* Forecast expenditures

DEPARTMENT OF NATIONAL DEFENCE  
Table of DND Expenditures by Major Category

(Thousands of Dollars)

Major Categories	1951-52 Expendi- tures	1952-53 Expendi- tures	1953-54 Expendi- tures	1954-55 Expendi- tures	1955-56 Expendi- tures	1956-57 Expendi- tures	1957-58 Expendi- tures	1958-59 Expendi- tures	1959-60		1960-61 Estimates
									Appropri- ations	Expendi- tures *	
Military Personnel Costs	346,832	407,148	400,155	444,943	464,491	500,261	544,835	554,268	563,677	549,769	563,117
Operations and Maintenance	379,678	409,266	439,087	486,491	524,818	563,097	603,099	591,265	629,749	591,974	621,318
Procurement of Equipment	486,212	718,086	765,088	649,542	568,907	458,637	412,354	425,923	360,237	271,966	298,984
Construction	173,336	266,399	166,861	123,421	135,814	140,430	91,907	75,772	120,031	85,600	98,353
Contributions to Infrastructure and NATO Budgets	3,519	13,438	13,274	12,069	10,541	14,040	10,468	12,406	21,500	12,900	14,500
Mid-Canada Line	-	-	-	833	46,327	130,469	33,210	2,196	-	-	-
GROSS CASH DISBURSEMENTS	1,389,577	1,814,337	1,784,465	1,717,299	1,750,898	1,806,934	1,695,873	1,661,830	1,695,194	1,512,209	1,596,272
ADD: Mutual Aid Transfers of equipment credited to Special Accounts	74,934	55,414	67,829	42,480	59,380	-	-	-	-	-	-
DEDUCT: Charges to Special Accounts	49,037	cr 12,667	46,379	93,810	60,166	47,508	27,410	237,089	15,000	11,557	3,000
BUDGETARY EXPENDITURES	1,415,474	1,882,418	1,805,915	1,665,969	1,750,112	1,759,426	1,668,463	1,424,741	1,680,194	1,500,652	1,593,272

\* Forecast expenditures



## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

FRIDAY, June 3, 1960

(10)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Forgie, Halpenny, Hellyer, Lambert, Macdonald (*Kings*), Parizeau, Thompson, Webster, Winch.—(12)

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (*Finance*); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns; Brigadier W. J. Lawson, Judge Advocate General.

The Committee resumed from Wednesday, June 1st, consideration of the 1960-61 Estimates of the Department of National Defence.

A copy of the NATO Handbook 1959 of the North Atlantic Treaty Organization was distributed to the Members of the Committee for their use.

The Honourable George R. Pearkes, V.C., read an extensive statement dealing with the North Atlantic Treaty Organization and was examined briefly thereon. The Minister was assisted by Mr. Armstrong.

At 10.50 o'clock a.m. the Committee adjourned to meet again at 9.30 o'clock a.m. Wednesday, June 8th, 1960.

Antoine Chassé,  
*Clerk of the Committee.*



## EVIDENCE

FRIDAY, June 3, 1960.

The CHAIRMAN: Gentlemen, we have a quorum.

You will recall, just at the end of Wednesday's meeting, the minister read a statement; and in the statement he included his statement on the United Nations.

We decided we would continue the questioning on United Nations. I think you, Mr. Winch, had a series of questions which you wished to ask in connection with the United Nations.

Mr. WINCH: I just had a couple of questions, Mr. Chairman.

Hon. G. R. PEARKES (*Minister of National Defence*): There was one unanswered question in regard to the numbers of forces from other countries with UNEF. Would you like me to provide that information at this time?

The CHAIRMAN: Yes, Mr. Minister. Would you proceed.

Mr. PEARKES: Brazil, a total of 635, all ranks; Canada, a total of 916, all ranks; Denmark, 561; Norway, 613; India, 1,179; Sweden, 659; Yugoslavia, 745. This makes a total of 5,322, of which Canada is supplying 17.2 per cent.

The CHAIRMAN: Thank you very much, Mr. Minister.

Mr. Winch, will you proceed with your questions.

Mr. WINCH: Unfortunately, sir, I am not able to stay all morning, for which I express my regrets. However, I had a couple of points on which I would like to have information.

I would like to ask the minister if he would enlarge on what he said at the last meeting, when he outlined at page 8, commitment No. 3:

the provision of forces to support the United Nations organization in maintaining its peaceful aims.

and on page 9, where he said:

I might say that this government has recommended on more than one occasion the establishment of an international police force under the auspices of the United Nations.

I was wondering if the minister could give us more detailed information as to the methods or the measures that have been taken, especially of recent date, to try to further this idea of a permanent and a larger United Nations police force, because I think that is of great interest to all of us, and to the people of Canada.

Mr. PEARKES: Yes. There have been representations and statements made by members of the government, saying that the general goal of a police force—a world police force, is a means which would help to check aggression. It would be able to improve difficult situations, and would be necessary if disarmament ever became a fact.

I have not before me the definite quotes which have been made, but I think everybody has heard statements, not only by the government, but in the house, by other members of other parties as well, supporting the idea of a United Nations police force, when the time comes for general disarmament.

Mr. WINCH: I would be interested in knowing how this is followed up through the United Nations itself. Have you ever put forward a definite proposal within the general assembly or the security council, or any special committee, and if so, is it merely a statement, or have you tried to bring the issue to fruition—to a head?

Mr. PEARKES: We would have to obtain that information from the Department of External Affairs.

Mr. WINCH: From External Affairs only?

Mr. PEARKES: Yes. The Department of National Defence is not a medium which would be doing that.

Mr. WINCH: I have one further question.

I was most interested in the minister's remarks, relative to Canada maintaining an air transportable battalion, ready to move anywhere in the world, should the need arise. Those are the words the minister used on page 9 of the statement. The use of any such battalion would have to be in action very speedily. I would be interested in knowing whether it would only be in the event of some local aggression or local war. But, it would actually be involving Canada in war. Under what authority then does the government move for the movement of Canadian forces to some spot in the world for the purpose of actually engaging in a war? From where does the authority come?

Mr. PEARKES: You will recall when the United Nations forces were sent to Korea, the support of the House of Commons was obtained. Now, according to the National Defence Act, regular forces can be sent anywhere in the defence of Canada. I have not the actual act here, but the act reads something like this—they can be sent anywhere for the defence of Canada, or in connection with—and I think it says the United Nations. Perhaps, I had better get it.

Mr. WINCH: That is the very point. Suppose the House of Commons was not sitting, and you could not make any submission to the House of Commons, how does the interpretation come that it is the defence of Canada? In some local conflicts, you cannot tell where it is going to break out. I was interested in that.

Mr. PEARKES: I had better get that, as I would rather have the actual wording of it.

The CHAIRMAN: While we are waiting for that, you, Mr. Winch, quoted page 9 of the statement; that is now in the evidence, at page 198. I mention this so we can identify it. You all have a copy.

Mr. HELLYER: It must be in this morning's mail, as I have not seen it.

The CHAIRMAN: Well, gentlemen, we had better distribute these.

Mr. HELLYER: The question arises as to whether we are going to have a general discussion on the minister's statement of last day, or whether we are going to postpone it until we have heard the other statements.

The CHAIRMAN: I think we should clean up United Nations; then he could make his short statement on NATO, and we will question on that; then he can make a short statement on NORAD, and we will question on that—and I think that might incorporate a lot of the questions which would be in place in the statement he made. Then, we could revert to the statement for any further questions.

Mr. HELLYER: With the understanding it will be held open for general questioning of the statement.

Mr. WEBSTER: While we are waiting for this information, could the minister tell me just exactly what contribution the navy is prepared to make to the United Nations?



Mr. PEARKES: The navy has no special forces actually earmarked for United Nations operations. The navy has a very large commitment, as I will show today, to the NATO forces in SACLANT, but our 14 vessels on the Pacific coast, which are not earmarked for SACLANT, would be available on very short notice to go on any United Nations operation that the government approves.

There are limited forces on the Atlantic coast. Now, both on the Atlantic coast and on the Pacific coast there are always standby ships ready to leave at four hours notice in an emergency.

Mr. FORGIE: Am I correct in assuming that the Canadian forces under NATO are the only volunteer professional army amongst those forces?

Mr. PEARKES: There are certain armed forces, and all the regular army, navy and airforce are volunteer forces; all volunteer forces.

Mr. BALDWIN: I have a point supplementary to Mr. Winch's question: can the minister say if there is any United Nations active opposition to the formation of a police force of the type mentioned, or is that a matter which will have to be referred to external affairs?

Mr. PEARKES: No international police force has ever been set up, that is, no international police force has ever been set up before an emergency has arisen.

Mr. BALDWIN: I understood that; but was there any active opposition, or would there be any active opposition there to the formation of any such international police force?

The CHAIRMAN: You mean within the NATO framework?

Mr. BALDWIN: Within the United Nations framework.

Mr. PEARKES: The suggestion has been advanced, but as I said it has never been accepted. But I am not in a position to say anything about what degree of opposition there has been, because I do not attend United Nations meetings.

Mr. HELLYER: In your opinion some international army, such as a United Nations army, would be essential if there was any possibility of real world wide disarmament?

Mr. PEARKES: Oh, I am certain it would be, because there are likely to be disturbances requiring armed forces to control them.

Mr. HELLYER: There would inevitably be disagreements which would have to be settled, and which would have to be enforced somehow; and you would have to have an international authority with some real power in order to develop it?

Mr. PEARKES: I think it would be a long, long time before the nations adopted this suggestion.

Mr. HELLYER: Mr. Khrushchev suggested that there should be total world disarmament without at the same time having suggested a United Nations army to enforce national boundaries and other problems which would have to be controlled if there were disarmament.

Mr. PEARKES: There has got to be some force to maintain and ensure order. I do not think you could any more do without an international police force if all the nations were disarming, than you could do without a city police force today.

Mr. CARTER: How could you distinguish between an army, a regular armed force, and a body for the enforcement of civil order? After the war Germany was forbidden to have an army, but she was allowed to have a body of trained people, which eventually became the nucleus of an army, for the preservation of peace and order within her boundaries.

The CHAIRMAN: Your question is how do you distinguish one from the other?

Mr. CARTER: That is right; how do you distinguish one from the other when one can be so easily converted into the other?

The CHAIRMAN: That is a good question.

Mr. PEARKES: I suppose they do merge one into the other, and it would depend, I would think, on the weapons that they carried.

Mr. CARTER: Following that line of thought through: supposing we had disarmament, but every country was permitted to have a body of troops, trained men of a certain size, and armed with certain types of weapons for the preservation of internal order, and suppose a situation should arise such as happened in Turkey. Would the United Nations forces be expected to intervene in that sort of thing?

Mr. PEARKES: I think that is too much of a hypothetical question for me to answer.

The CHAIRMAN: The Chair is allowing some questions right now while we are waiting for the documents which the minister has sent for so that he may deal with Mr. Winch's question.

Mr. CHAMBERS: There is a difference between a police force and a force capable of aggression. And as the minister said, it depends on the arms that they carry. For instance, if they are restricted to small arms, such as rifles and pistols, they perhaps would be considered as police. But if they got into the order of artillery, and anything larger than that, they might not be so considered.

Mr. CARTER: That is not my point. I readily admit that; but you are going to have another body, such as the United States body; and where would they fit into a situation like that?

The CHAIRMAN: We were talking more about a United Nations police force.

Mr. BALDWIN: He is talking about ensuring order between nations rather than ensuring the borders of nations. That is the distinction.

Mr. PEARKES: I am afraid they have had to send over for the memorandum which I wanted.

Mr. WINCH: In that case, perhaps we could have it at the next meeting.

The CHAIRMAN: I think that we should hold open the United Nations matter and the minister might give us his statement on NATO at this time. I think we will distribute copies of this statement before the minister starts to read it. Are we all set now?

Mr. PEARKES: The objective of the North Atlantic Alliance is to avert war by maintaining an effective deterrent. This aim was approved by the North Atlantic Council as early as January, 1950, and is still being pursued. Methods for its implementation have undergone changes over the years, but NATO's basic defence concept has remained the same—the concept of the deterrent.

The North Atlantic Treaty was signed on the 4th of April, 1949. A series of "conquests without war" by the communists in Europe, had culminated in February, 1948, in the "coup d'etat" in Prague. This coup was a sharp reminder to the western powers that defensive action was needed. At the time that Canada, together with eleven other like-minded nations signed the North Atlantic Treaty in Washington, the military posture of these allies was extremely weak. They had very small regular forces in being, and their reserves of trained manpower were inadequately equipped and ineffective. Faced with the Soviet threat, the west at that time was incapable of offering serious

resistance, nor was the total fighting force strong enough to deter attempts of an aggressive nature. Since 1949 there has been a gradual development both in the number and calibre of the forces involved. Today the NATO forces provide the means of assuring a potential aggressor that he would be forced to make plain his intentions. The military situation today includes a highly organized series of commands with forces from many nations assigned to them. At its meeting in December 1957, the council, in ministerial session, concurred in a NATO plan accepting the minimum forces recommended by the commanders.

Canada's military part within the alliance includes not only the air division and brigade group and ships earmarked for SACLANT which are our major commitments but contributions to integrated headquarters.

Now if you would care to look at pages 86 and 87 of the NATO handbook you can see where Canada fits into this organization from the command level. At the North Atlantic council which you see at the top of the page we have a permanent representative, at the present time Mr. Jules Leger. Besides having a diplomatic staff, he is provided with a military staff headed by Major-General George Kitching, who has recently moved his headquarters from London to Paris in order to be associated more closely with our Ambassador. The North Atlantic Council meets also in ministerial session and it is usual for there to be three such meetings a year. There is one of External Affairs ministers—or secretary of state for foreign affairs—in the spring. Mr. Green has recently returned from one at Ankara. There is one for defence ministers which is also held in the spring, in March. I attended one this year at Paris. There is a third for ministers of external affairs and ministers of national defence and finance which also is held in Paris each December.

Reporting directly to the North Atlantic Council is *the military committee*—the senior military authority in the NATO organization. The military committee is composed of the senior military official of each member country. At the level of these chiefs of staff the military committee meets at least twice a year. You will see that on the chart. It is responsible for making recommendations and supplying guidance on military questions. Canada's representative is Air Marshal F. R. Miller, chairman of the chiefs of staff committee. To enable the military committee to function in permanent session with effective powers of decision, each chief of staff appoints a permanent military representative, who, between meetings of the chiefs of staff, deals with and settles in permanent session, questions coming within the scope of the military committee. This committee (in permanent session) sits in Washington and the Canadian representative is Air Vice Marshal M. M. Hendrick, chairman, Canadian joint staff in Washington. He has under him a staff of experts from all three services.

*The standing group*, as the executive agent of the military committee, is responsible for strategic guidance in areas where NATO forces operate and as such is the body to which NATO commanders are responsible. It is composed of representatives from the United States, the United Kingdom and France. Serving on the standing group planning team in Washington is a Canadian colonel. This group has a liaison office in Paris through which it passes its recommendations and decisions to the council. A Canadian officer serves as an assistant standing group representative in this office.

On the continent of Europe is the *allied command Europe*. Here you will have to turn over to page 90. The forces in this area are under the command of the supreme allied commander Europe. The overall structure of SACEUR forces is designed to provide an effective, balanced shield for the NATO European area and to support the concept of deterring major and



limited war. Achievement of this vital objective by practical cooperation between a number of nations in *peacetime* must fairly be regarded as representing an unprecedented level of common international purpose and cooperation worthy of continued vigorous support by Canada.

Serving at the headquarters of the supreme allied command Europe near Paris are a number of Canadian staff officers, some of them holding important senior positions. Air Marshal Dunlap, RCAF, is the deputy chief of staff, operations, under General Norstad. In addition, two group captains and five lieutenant colonels serve in the various specialized branches of that headquarters. Altogether some fifty Canadian personnel serve at SHAPE.

Canadian officers serve in many of the subordinate integrated headquarters of SHAPE, for instance at allied air forces central Europe, an RCAF air commodore is the chief of plans and policy, and another air commodore is assistant chief of staff, logistics. Two other Canadian senior officers have important positions in the operations and logistics division there.

At the 4th allied tactical air force headquarters, situated at Ramstein, Germany, the chief of staff is an RCAF air commodore and another Canadian senior officer serves as assistant deputy chief of staff, operations.

At the headquarters of the northern army group, one of our officers is serving as branch chief of plans, and at headquarters allied forces north, another Canadian officer is deputy chief of staff operations.

Apart from these officers serving in the various headquarters, Major-General Bernatchez is the chairman of the NATO military agency for standardization and is charged with the important responsibility of expediting NATO military standardization under standing group policy. He also has other Canadian staff officers serving in his international staff. The deputy commandant of the NATO defence college is also a senior Canadian officer.

Altogether there are over 300 Canadian service personnel serving in the various command headquarters and agencies of NATO apart from our individual Canadian force commitments. I think from the above the important role played by Canadians in the command and staff structure can readily be seen.

Our brigade group and air division are serving under the overall command of the commander-in-chief allied forces central Europe. Stationed in Germany at Soest, Hemer and Werl, the 4th Canadian Infantry Brigade Group is made up of some 5,500 men. The brigade group consists of three infantry battalions and the necessary supporting weapons to allow it to operate as an independent tactical formation. The major units of the brigade at present consist of the 1st regiment, R.C.H.A., the 1st/8th Canadian Hussars, the 1st battalion The Canadian Guards, the 2nd battalion The Queen's Own Rifles of Canada, the 1st battalion The Black Watch. The support element for the 4th Canadian infantry brigade provides administration to the members of the force. In addition to the Brigade Headquarters, the main elements are the 1st Canadian Base Medical Unit and the 1st Canadian Base Ordnance Unit.

The basic role of the 4th Canadian Infantry Brigade Group is to assist in the protection of Western Europe by delaying any advance that might be made by enemy ground forces.

The NATO shield force is not merely a trip wire to sound an alarm, but is in sufficient strength to cause an aggressor to pause and concentrate for a break through, thus disclosing his object is not merely a raid or to make a minor incursion, but to initiate a major active aggression. The fact that he meets strong opposition from the start might cause him to reconsider his action before accepting the consequences of a major war.

The brigade group is presently—

Mr. BALDWIN: There is quite an omission, Mr. Minister.

The CHAIRMAN: It will be in the record. The minister is now going back to his text.



Mr. PEARKES: I made certain insertions last night. I will read it again, if you like.

Mr. BALDWIN: No, that is all right.

Mr. PEARKES: I think it is an important addition.

Mr. HELLYER: I agree with you.

Mr. PEARKES: Thank you. The brigade group is presently serving as part of the NATO Northern Army Group. As already announced, the Government decided this year to acquire the 762mm/Honest John surface-to-surface guided missile system to increase the Brigade's support efficiency. This weapon has a nuclear capability.

The estimated cost of operation and maintenance of the Brigade is \$36 million annually. This cost, of course, does not include expenditures on new equipment and the training involved in Canada. Our troops are equipped with up-to-date weapons and up-to-date vehicles. They have been armed with a new rifle, new machine guns and modern tanks. We are already improving the latter that is, the Centurion tank. They are being refitted with a 105-mm gun instead of the present 20-pounder and the tanks also have increased armour protection and increased range.

This up-gunning is also taking place in the British army, and we are conforming along their lines of development. We have deployed a small army air unit for observation and communication duties.

The operation of a Canadian Brigade overseas presents many problems. All of our forces are volunteers and our standard of living is high. Consequently, we provide facilities for the members of our forces overseas to have their dependents with them, and in this connection provide a number of married quarters, full educational facilities, shopping facilities, such as the Maple Leaf services, and other amenities.

Recently arrangements have been completed for a new plan of rotation of units of the Brigade Group in order to allow for the rotation of approximately one third of the Brigade per year instead of rotating a complete Brigade every two years. This will be the first year in which that is in full operation. This has two advantages in that it will provide more continuity in the Brigade Group and will reduce considerably the cost of transportation of both servicemen and dependents.

The 1st Canadian Air Division is a part of the 4th Allied Tactical Air Force. The major components of the Air Division are presently located as follows: the Headquarters situated at Metz in France; 109 Communications Flight at Grostenquin in France; the 30th Air Materiel Base located at Langar, Nottinghamshire, England; 137 Transport Flight, 314 Technical Service Unit, and 312 Supply Depot—all at Langar; 61 Aircraft Control and Warning Squadron located at Metz which operates a high powered long range search radar providing warning and identification control of the Division's aircraft; and 601 Telecommunications Squadron.

There are four fighter wings in the division, each equipped with two Sabre squadrons and one CF-100 all-weather interceptor squadron:

No. 1 Fighter Wing is located at Marville in France;

No. 2 Fighter Wing at Grostenquin;

No. 3 Fighter Wing is located at Zweibrücken in Germany; and

No. 4 Fighter Wing at Baden-Soellingen in Germany.

Two other commitments undertaken by the air force in Europe are:

(1) Co-operation in operating an air-firing range located in Sardinia. This range is shared by the R.C.A.F., the Italian Air Force and the German Air Force.

(2) The R.C.A.F. are providing an Advisory Group in Germany to give the German Air Force technical and training assistance in the operation of their fighter operational training unit at Oldenburg.

The annual cost of the Air Division is estimated to be nearly \$91 million. This is for operating costs and does not include expenditures on new equipment or training in Canada. In addition, facilities similar to those provided for the Brigade Group, in so far as married quarters, educational facilities and other amenities are concerned, are also provided for members of the Air Division and their dependents.

At NATO's request the Government has recently decided to re-equip the eight squadrons now armed with F-86 Sabre aircraft with an aircraft capable of carrying out a strike reconnaissance role. The aircraft selected for this is the CF-104, which is now being built at Canadair, with the engines being manufactured by Orenda in Toronto. This aircraft could be armed with a tactical nuclear weapon.

Mention might be made of the *common infrastructure programme*—I was asked some questions about this the other day—which has been established in the Alliance. The word "infrastructure" has been borrowed from the terminology used by the French railways to denote such basic works as embankments, bridges and tunnels, etc. NATO has adopted this term to denote all those fixed installations which are necessary for the deployment and operation of the armed forces—for example, airfields, signals and telecommunications installations, military headquarters, fuel pipelines and storage, radar warning and navigational aid stations, port installations and so forth.

Installations which are set up solely for the use of national forces are known as *national infrastructure* and are paid for out of national budgets. Installations which are set up at the request of the NATO international commanders for the training of international forces in peacetime or for their operational use in wartime are called *common infrastructure*. Such installations are financed collectively by member governments.

This is the first time that members of an Alliance have shared resources in order to build up an adequate defensive force. Common infrastructure is a new international experiment resulting from a mutual desire to resist aggression. It proves the accomplishments of international solidarity in all fields, even in the highly technical ones. Canada's share of commonly financed items is approximately 5 to 6 per cent, which, together with other items of NATO military budgets represents the sum of \$14½ million in this year's estimates.

A vital factor in our Alliance is the geographical position of the north Atlantic ocean between our countries. To provide military protection at sea there has been established a joint command known as the *allied command Atlantic*. You will see that on your chart. The supreme allied commander Atlantic, whose headquarters are situated in Norfolk, Virginia, in an emergency would have under his control forces from the United States, the United Kingdom, Canada, Denmark, the Netherlands, France and Portugal.

Serving with SACLANT and subordinate headquarters are some fourteen Canadian naval officers. The assistant chief of staff, personnel and administration, and the assistant director of plans, defence operations, together with the director of the annual review at SACLANT headquarters are all Canadians.

We also have a Canadian naval officer serving at the headquarters of the commander-in-chief eastern Atlantic area and one at headquarters commander-in-chief, western Atlantic area.

Whereas the original concept of war at sea was a requirement to convoy large numbers of ships from the north American continent to Europe, the outlook is now changed. The Russians—as I said at the last meeting—have a

large and powerful submarine force—perhaps more than four hundred submarines—some of which may be capable of mounting missile attacks upon this continent.

One of the most important tasks of the supreme allied commander Atlantic, therefore, is to make provision for the detecting, hunting and killing of hostile submarines in the NATO area on the outbreak of any hostilities.

Canadian forces earmarked for operational control by SACLANT include one aircraft carrier, 29 escort vessels and 3 squadrons of R.C.A.F. maritime aircraft. These Royal Canadian Navy and Royal Canadian Air Force forces co-operate closely with SACLANT in planning and training, but during peacetime are under the command of the Canadian commander maritime Atlantic, Rear Admiral Pullen in Halifax, although they do take part in SACLANT exercises several times during the year.

Admiral Pullen has an additional responsibility, that of commander of the *Canadian Atlantic sub-area* which is a NATO command under SACLANT and also has its headquarters at Halifax. He would have operational control of any forces, the Canadian, United States, United Kingdom or any of the other countries taking part in SACLANT, which the commander of SACLANT would allocate to his subordinate command.

The fact that our forces are in Europe is a very important sign to the continental partners that we do intend to live up to our full commitment. I would go so far as to say that our NATO allies would consider it a disastrous blow if Canada withdrew her forces from Europe. Canadian numbers may be small, but they are a visible indication of our willingness to play our part in this joint military endeavour.

From what I have said, you will see that our NATO commitments are an important part of our defence effort. As I stated yesterday, participation in joint alliances is the most effective means of strengthening the western defence position. The government feels that it is of the greatest importance that we play our full part in the North Atlantic Treaty Organization. The Prime Minister on many occasions has stated that our forces will stay in Europe as long as they are required. For example, on June 2, 1958, during the visit of the President of the Federal Republic of Germany, he stated: "We reaffirm our belief in and support for the North Atlantic Treaty Organization as a defensive organization dedicated to peace and with no offensive objectives. I wish to make it clear"—and I am still quoting what the Prime Minister said—"that whatever threats may be made against those nations which believe in the mission of NATO and the necessity for its continuance, Canada will maintain forces in Europe as long as international disquiet and justifiable fears require Canadian participation."

The importance of playing this part has been underlined by international events in the last few weeks. I hope that all members of the committee agree that we will continue to do our utmost to support this alliance for we must continue to stand together. Never has the old adage that united we stand, divided we fall, been truer than it is at present. I am sure that members of the committee will have noted what the Prime Minister said only two days ago, namely, and I quote, that "as a result of the events of the last couple of weeks there has been a greater realization on the part of NATO countries of the need for unity than possibly there has been at any time in recent years". That need for unity has certainly resulted in a new feeling of cohesiveness. NATO may not be perfect, but it has one outstanding achievement—that by cooperation and consultation we have presented a firm front—and the result has been the maintenance of peace and the prevention of any warlike incursion by the communist powers in the NATO area.



The CHAIRMAN: Thank you very much, Mr. Minister; that was well done. Gentlemen, have we questions on the North Atlantic Alliance?

Mr. CARTER: Mr. Chairman, I have been wondering about this. We do not have very much of an interval between Wednesday and Friday to study statements made by the minister.

The CHAIRMAN: That is right.

Mr. CARTER: I was wondering if possibly this other statement could be put on record, and then we would have had more time to study it when we come for the next meeting. I wonder if it would be the best way to use the time available this morning by having the minister give his other statement.

The CHAIRMAN: That could be. What is your wish, gentlemen?

Mr. CHAMBERS: I think that the way they are departmentalized now makes for a clearer discussion, and the evidence will follow better.

The CHAIRMAN: The original thinking, of course, Mr. Carter, was, as you know, that we put questions while it was fresh in our minds. I can see your thinking on it, Mr. Carter. It is a matter upon which the committee will have to agree. I do not care which way we do it.

Mr. CARTER: Mr. Chairman, I understand we have not finished with any one of these. I understand all of these are part of a general statement.

The CHAIRMAN: Yes. As you know, we had the general statement and, in the latter part of it, the minister mentioned United Nations—and we were going to question on that, but as there was some evidence we did not have here, we went on to the NATO statement.

There is only one thing wrong, if we go on to NORAD now. It seems to me it is going to be a little confusing, and I think we would be well advised to stick to NATO, until we get through.

Mr. CARTER: You are not saying, in view of questions we have asked in connection with NATO, that we cannot go back?

The CHAIRMAN: No. We have held open United Nations and, undoubtedly, by the time we finish questioning this morning on NATO, we will hold it open for the next meeting.

Mr. CARTER: Well, I have some questions on the minister's first statement.

The CHAIRMAN: You were not here at the first part of this meeting, Mr. Carter. I explained to Mr. Hellyer that we were going to go over the United Nations, question on that; then, the questions on NATO, followed by the questions on NORAD. We left the general statement open, so you could go back to it.

Would you continue with questions on NATO.

Mr. PEARKES: I do not know whether they would like further information on the logistics supply of the brigade and the air division.

The CHAIRMAN: I think it would be very handy and, if you have this information with you, I would ask that you give it at this time.

Mr. PEARKES: I have not been able to get copies made of it.

The CHAIRMAN: That is all right; it will be on the record.

Mr. PEARKES: Maintenance policy 4th Canadian infantry brigade group—Europe—logistic support—general.

1. The logistic support of the brigade group is based on U.K. supply lines. Responsibility for the supply of materiel is as follows:

- (a) the U.K. supplies available common-user stores and spare parts;
- (b) Canada supplies all clothing and personal equipments;
- (c) Canada supplies all non-common-user stores and spare parts including those of U.S.A. origin;



- (d) Canada supplies common-user stores and spare parts which the U.K. is unable to provide and which cannot be obtained by local purchase.
2. Common-user items which are provided from British sources are:
- (a) liquid fuels;
  - (b) lubricants and greases;
  - (c) food (provided at Canadian scales);
  - (d) general stores;
  - (e) engineer training and defence stores;
  - (f) limited range of ammunition, technical and vehicle stores.

#### *Repair of vehicles*

3. The brigade group is responsible for the repair of its vehicles. Heavy repairs beyond the capabilities of the brigade workshops are carried out in British workshops with assistance from Canadian personnel. Equipment of U.S.A. origin which cannot be repaired by the brigade group or the British is sent to the appropriate U.S. army depot for repair.

#### *Accommodation stores*

4. Accommodation stores are obtained from British sources in accordance with British scales.

#### *Postal service*

5. Postal service to and from the brigade group is the responsibility of the Canadian army. This includes the establishment of forces post offices for the sale of postage stamps, sale and encashment of postal money orders, acceptance and delivery of telegrams, provision of general post office services and compliance with instructions of the field censor when required.

#### *Works Services*

6. Works services for the maintenance of accommodation are provided by Canadian personnel in accordance with British regulations. Deviations from British scales or policy are referred to army headquarters for prior approval. Stores required by the works services are provided by the British.

#### *Emergency supply from U.S. army*

7. The U.S. army in Europe has been authorized to provide emergency stores to the brigade group.

In regard to the air force, materiel to support the R.C.A.F. air division in Europe is supplied from three sources:

- (a) First; a substantial percentage of domestic non-military type materiel is procured in Europe and the U.K. through the offices of the Department of Defence Production.
- (b) Second; POL—and that is fuel, and so on—rations, ammunition and explosives are furnished by the U.S.A.F. Europe as a result of an arrangement made between D.N.D. and U.S.A. Department of Defence. The jet and motor fuel are in the main conveyed to the R.C.A.F. bases through the NATO pipeline system which in turn is fed by U.S.A.F. bulk fuel installations for the Canadian and U.S. requirements.
- (c) Third, the major support quantitatively with respect to technical and combat support requirements is provided by the R.C.A.F. air materiel base in Langar, England. Stocks at this materiel base are replenished from Canadian industry through the R.C.A.F. supply depot complex in Canada.

I think that takes care of that. I am giving you all the information I can.

You may be interested in the number of houses and schools which obtain in Europe.

At Baden-Soellingen, we have a total of 401 quarters in the R.C.A.F.; at Gros Tenquin, 444; Hemer, 563; Langar, 200; Marville, 419; Mercy les Metz, 152; Soest, 608; and, at Unna, for the army, another 78; Werl, 369; Zweibrücken, 400, making a total of 3,634.

While for schools we have at Baden-Soellingen one school for the air-force with 40 classrooms. At Grostenquin 38 classrooms; at Hemer, one with six classrooms and another with 14 rooms, and 12 temporary rooms; at Marville a school with 32 classrooms; at Metz, 26 classrooms; at Soest, one with 12 classrooms and one with 16 classrooms and nine temporary rooms; at Werl, one with 16 rooms and three temporary rooms; and at Zweibrücken, 41 classrooms, making a total of 266 classrooms which we have to maintain for the dependents of our servicemen in Europe.

The CHAIRMAN: There are about 40 to 45 students in each classroom, would you say?

Mr. ARMSTRONG: It would run probably a little less than that, probably around 35.

The CHAIRMAN: That is quite a population.

Mr. MACDONALD (*Kings*): On page 2 of his statement the minister has said:

At its meeting in December, 1957, the council in ministerial session, concurred in a NATO plan accepting the minimum forces recommended by the commanders.

Then the minister has gone through the various commitments of troupes that we have in Europe, and I wanted to ask whether these commitments are substantially the commitments of the forces which we accepted at the meeting in 1957?

Mr. PEARKES: Yes; Canada has maintained all her agreed commitments, that is, all the commitments that she agreed to.

Mr. CHAMBERS: Is this substantially true of all NATO partners?

Mr. PEARKES: I am not in a position to say what other nations are doing.

Mr. MACDONALD (*Kings*): Mr. Chairman, I would like to ask a couple of questions about the army brigade group in Europe. I am glad to note that the army is being kept up to date with weapons suitable for present day warfare, but I wonder if the minister could give us a brief outline of how the 762 millimeter rocket with the Honest John launcher is handled within this brigade, and what type of unit handles it?

Mr. PEARKES: It will be operated by an artillery regiment with the brigade. The troops will be trained, first of all, in Canada; and there will be a school established at Shilo, which is a training centre in Manitoba; and there will be a small detachment of these Honest John launchers kept there, but the balance will be in Europe.

So the troops will have their training before they go to Europe. There are personnel now being trained in the use of the Honest John at the American training centres.

The CHAIRMAN: Is there another name for the Honest John, Mr. Minister?

Mr. PEARKES: No, the Honest John is the name which is used by all European forces.

Mr. MACDONALD (*Kings*): You mentioned also an increase in the armament of the centurion, in its up-gunning from 20 pounders to 105 millimeters, and an increase in armament.

Mr. PEARKES: Yes.

Mr. MACDONALD (*Kings*): Would the minister have any details of how that increase in armament is carried out, and what it is on the centurion?

Mr. PEARKES: It will be carried out mainly in our workshops in Germany.

Mr. MACDONALD (*Kings*): I was interested mostly in what it is.

Mr. PEARKES: It is reinforcing some of the armour plate on the tank in some of the vital points of the tank. The up-gunning has been done in accordance with the practice which has been carried out in the British army. The centurion, as you know, is a British tank, and they have improved it; they have increased the size of the gun, so that it is capable of meeting Russian tanks; and in order to attain rapid accuracy, it is supplied with a ranging machine gun as well.

They have worked out a practice whereby you can get accurate hits on a target almost immediately. I saw a demonstration of it in England a year ago, and the accuracy of this gun is remarkable.

The CHAIRMAN: This is an English gun, too?

Mr. PEARKES: That is right.

The CHAIRMAN: Are there any further questions?

Mr. MACDONALD (*Kings*): I have one other question: I spoke with a battalion commander who had served in the armed brigade group overseas at one time, and he made a suggestion that possibly shorter rotation in Europe of perhaps two years, without having their families, and without having the maintenance of schools and married quarters and so on might be a more satisfactory arrangement for several reasons other than financial. Of course this practice was started several years ago and it has been carried on.

I wonder if the minister could enlighten us on some of the pros and cons with regard to that possibility?

Mr. PEARKES: The question of allowing their families to accompany soldiers to Europe has received very careful consideration. But remember, our force is a voluntary force, and I think it would be very difficult to get men to leave their families here in Canada over a period of two years or more, and for us to send those men to Europe. I question very much whether we would be able to maintain the strength of our army.

To have troops serving in Europe for less than two years would be neither economical nor effective. They would be hardly climatized and they would not be trained to work with the other NATO forces; they would not know the terrain and that sort of thing, nor have the more advanced training which cannot be given to them in Europe in a period of less than two years.

Mr. LAMBERT: I would like to revert back to Mr. Macdonald's original question. The minister answered that the training for the use of the honest John is carried on in part in Canada at Shilo. Obviously, this does not include training in the use of the weapon with its nuclear capability.

Mr. PEARKES: That is correct. Any training carried out in Canada would not be carried out with any sort of nuclear warhead.

Mr. BALDWIN: Mr. Chairman, I should precede my question by saying that I sat in at the NATO parliamentarians conference in Washington last fall and as a junior member I was shunted onto the scientific committee. There is a very interesting comprehensive report which was prepared under the leadership of Senator Jackson of Washington. There are one or two items which I think might be of interest as a background for a question to the minister. One of the suggestions in this report is that there should be an early decision to set up a broad and permanent Atlantic institute for defence studies. Has any word of that come to the attention of the minister?



Mr. PEARKES: There is a NATO staff college which has been set up at which officers of all the services attend from all the different countries. There is a regular allotment of students. We have an officer on the staff college, and we have students attending regularly. You might say it is a sort of a study group.

Mr. BALDWIN: I believe this staff college has been in existence for some time.

Mr. PEARKES: I think that staff college has been in existence for about five years. I believe civilian personnel also can be sent there.

Mr. BALDWIN: Where is this college situated?

Mr. PEARKES: In Paris.

Mr. BALDWIN: The other question is in respect of the prospect of setting up and establishing a missile training center. That was a proposal advanced by the parliamentarians' council in 1958. According to the report of Senator Jackson up until last summer there had been detailed engineering surveys of potential training areas and SHAPE is now evaluating the relative merits of various areas. Apparently these areas were Portugal, Italy, Greece and Turkey. I wonder if any decision has been taken and if that project is being advanced?

Mr. PEARKES: I do not think any decision has been reached. So far as I know there are no funds in these estimates for an intra-structure NATO establishment missile training centre.

Mr. CARTER: I would like to come back to Mr. Macdonald's question about tanks. Have there been any new developments in respect of anti-tank weapons? If so, can the minister say what kind of anti-tank weapons these are.

Mr. PEARKES: We have the RCL-106mm rifles. Eighteen of these recoilless weapons, plus the required ammunition and reserves are provided to strengthen the anti-tank capability of the infantry battalion. That is, eighteen of these recoilless 106mm anti-tank rifles are with each battalion. Each battalion now holds twelve of these weapons which is double the number held last year. Then there is the 81mm mortar. Eighteen of these weapons, plus the required ammunition and reserves are provided for the increase of the fire power of the infantry battalion. Each battalion now holds twelve of these which is slightly over what they had before.

The CHAIRMAN: Does that satisfy you?

Mr. CARTER: Yes. The minister indicated he could not answer Mr. Chamber's question about whether the other NATO partners had kept their commitments. Could the minister tell the committee how many army divisions actually are under NATO command at the present time, if that is not classified.

Mr. PEARKES: That is classified information. I would not give it at an open meeting.

Mr. CARTER: We have all read statements from time to time in the papers, either directly or indirectly attributed to General Norstad to the effect that he does not think he has all the troops he should have for the job he is supposed to do. Can the minister say whether or not we are making up in fire power for our lack in numbers?

Mr. PEARKES: The fire power to man ratio has increased a very great deal, not only by the addition of new conventional arms but also by the introduction of the nuclear element.

Mr. LAMBERT: On page 7 of the minister's statement there is the estimated cost of operation and maintenance of the brigade exclusive, however, of the expenditure for new equipment and the training involved in Canada. Is there any estimate of this additional cost, in any one year, which might indicate an overall cost for this particular provision?



Mr. PEARKES: I think it would be impossible to separate the training in Canada for the NATO force from the general training in Canada and provision of general equipment. It might help you if you turn to this little pamphlet which was issued. On page 10 you will see some figures which are given there, but I do not think it really answers the question which you have asked. I do not think it would be possible to.

The CHAIRMAN: Gentlemen, we opened up the meeting and the minister had to send out for some information. Do you have that information now?

Mr. PEARKES: Yes.

The CHAIRMAN: Then I think we will close off the meeting after eliciting that information.

Mr. PEARKES: There is nothing, in law, that requires the government to obtain the approval of parliament before the sending of a regular force on duty.

Whether or not the regular forces are on active service, they come under section 34 (1) of the National Defence Act. By virtue of that act they are at all times liable to perform any lawful duty; that is, any duty falling within the executive responsibility of the government.

Now, the actual words of the act are—and I quote from section 34 (1):

The regular forces, all units and other elements thereof and all officers and men thereof are at all times liable to perform any lawful duty.

So, if the government of Canada assigned to them responsibility for taking part in any United Nations' operation, they would, by virtue of this section in the National Defence Act, be able to leave Canada on that duty.

However, in the past, the government has—and I think quite properly—taken the stand that in accordance with its constitutional practice parliament should be informed of the decision of the government to send any substantial forces beyond Canada, and be given an opportunity to approve or disapprove of the decision. That was done in the case of Korea.

I assure the committee the present government would follow this course, should it be decided at any time to despatch substantial bodies of our forces beyond Canada in support of any international commitment undertaken by Canada.

The CHAIRMAN: Thank you, Mr. Minister, for a very informative morning.

Mr. LAMBERT: Relating this information the minister has given us to the particular question raised by Mr. Winch, and the use of this special battalion on police duties, is it not correct that that unit would be sent abroad at the direct request of the United Nations, rather than by unilateral action by Canada, unless it was in the actual defence of Canada?

Mr. PEARKES: There is no intention of Canada taking unilateral action to send any force out of Canada.

That battalion is earmarked for employment with a United Nations' force. If it was for the direct defence of Canada, then it might be sent out, but it is earmarked for employment with a United Nations' force.

The CHAIRMAN: We will convene again next Wednesday, gentlemen, in the same room. Thank you very much.

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## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

WEDNESDAY, June 8, 1960.

(11)

The Special Committee on Defence Expenditures met at 3.30 o'clock p.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Fairfield, Halpenny, Hellyer, Lambert, Macdonald (*Kings*), Parizeau, Smith (*Calgary South*), Thompson, Webster, Winch—13.

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (*Finance*); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns.

The Chairman presented the Third Report of the Subcommittee on Agenda and Procedure, reading as follows:

The Steering Committee presents its

### THIRD REPORT

The Subcommittee met at 3.45 o'clock p.m. on Thursday June 2nd.

*Present:* The Chairman, Mr. G. E. Halpenny, Hon. Paul Hellyer, and Messrs. Fairfield, Smith (*Calgary South*), and Winch.

Our NATO alliance and commitments being one of the most important aspects of Canada's defence, the Steering Subcommittee considers that a tour of enquiry by the Committee to SHAPE headquarters, at Paris, France, to the 4th Canadian Infantry Brigade, at Soest, Germany, and to the 1st Canadian Air Division at Metz, France, should be undertaken at the earliest possible time, and the Subcommittee recommends that arrangements be made to that end by the appropriate authorities for Friday, June 17th.

Respectfully submitted,

G. E. HALPENNY,  
*Chairman.*

After discussion thereon, Mr. Smith (*Calgary South*) moved, seconded by Mr. Winch, that the said Report be adopted.

And the question having been put thereon, the proposed motion of Mr. Smith was, on a show of hands, resolved in the affirmative on the following division: Yeas, 10; Nays, None.

On motion of Mr. Parizeau, seconded by Mr. Webster,

*Resolved*,—That permission be asked from the House, for the Committee to adjourn from place to place.

The Committee resumed from Friday, June 3, consideration of the 1960-61 Estimates of the Department of National Defence.

The Minister, Honourable George R. Pearkes, V.C., read a statement dealing with NORAD.

At 5.00 o'clock p.m. the Committee adjourned to meet again at 9.30 o'clock a.m. Friday, June 10th.

Antoine Chassé,  
*Clerk of the Committee.*



## EVIDENCE

WEDNESDAY, June 8, 1960.

3.30 p.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Your steering committee met on June 2, and wishes to recommend to the entire committee the following:

Our NATO alliance and commitments being one of the most important aspects of Canada's defence, the steering subcommittee considers that a tour of inquiry by the committee to SHAPE headquarters, at Paris, France, to the 4th Canadian Infantry Brigade, at Soest, Germany, and the 1st Canadian Air Division at Metz, France, should be undertaken at the earliest possible time, and the subcommittee recommends that arrangements be made to that end by the appropriate authorities for Friday, June 17.

Gentlemen, before we have any discussion on the steering committee's recommendation, I would like to suggest that this, in my books at least, should be the unanimous wish of the entire committee. Personally, I think it is a very sane thought on the steering committee's part. A great percentage of our total defence budget is spent at NATO.

Your steering committee discussed the pros and cons of this. My own personal recommendation is that we do go. However, this is merely our recommendation, and I would like some discussion from particularly those gentlemen who were at the steering committee meeting—Messrs. Fairfield, Smith, Paul Hellyer and Harold Winch.

Mr. HELLYER: Mr. Chairman, I am one of those who strongly believes that the committee should visit our NATO establishments—and I so expressed myself at the steering committee meeting.

Unfortunately, there is the question of timing, and with the tremendous volume of work yet to be accomplished by the House of Commons and by the several committees now sitting, which necessitates attendance by a number of members, it would not be convenient to take such a large number of members away during these remaining few weeks. Under that circumstance, I would hope or suggest that perhaps we could postpone the trip until after the end of the session and go then, rather than going in the meantime.

I know this suggestion is not in accordance with your original proposal, Mr. Chairman—

The CHAIRMAN: I realize that, Mr. Hellyer.

Mr. HELLYER: —but I feel bound to express, on behalf of the Liberal party, the position that we can ill afford to spare the complement of people who will be going on this trip during the next two or three weeks. We feel we need everyone here on the job that we can manage to muster. For that reason, we would hope that perhaps the trip might take place, but that it would take place after the end of the present session.

The CHAIRMAN: Before I recognize Mr. Smith, you are working on the premise, Mr. Hellyer, that the house will be either in a summer recess or prorogued in two or three, or even four weeks' time. Is that correct?

Mr. HELLYER: Well now, you are asking for a little crystal ball guessing.

My own opinion is that the house will not be finished in two or three, or even four weeks, if we complete all the business that was anticipated. If, however, the house should rise at the end of June and come back after the summer adjournment, then we would have no objection to proceeding on the trip in between.

The CHAIRMAN: Mr. Smith.

Mr. SMITH (*Calgary South*): Mr. Chairman, my thoughts and differences are not too far removed from those of Mr. Hellyer. I only differ with him on the question of timing. I think from the committee's standpoint—the steering committee, certainly—there is not any question as to the importance and the nature of the visit, and I do not intend to address any remarks to that but purely to Mr. Hellyer's comments.

He suggested this trip should be taken, Mr. Chairman, at the end of the session. We will all recall Mr. Hellyer and, in fact, all of us speaking early in the discussions of this committee, and emphasizing the importance of its work. I suggest, Mr. Chairman, that there is not anything more important than the function of this committee concerning very vital questions. As you yourself have said, the relative part of the defence budget—a very large part of it, is devoted to alliances and, therefore, it would seem imperative that we should make an inspection.

You will recall also, Mr. Chairman, that many of us have said that in order to make a comprehensive study, there should be no limitation in the area of the examination, or the type of examination. I, sir, suggest that the work of this committee cannot be properly done by sitting in this committee room and purely receiving evidence from officials, without having a first-hand look. And we need not feel we are creating any precedent in suggesting the committee should move afield to look at any other operations.

I revert to Mr. Hellyer's point. He suggested we should leave it and do it at the end of the session. This presents a very difficult problem because, at the end of the session, it is conceivable the committee may be in the position to want to submit a report, and we would then have to submit a report, of course, sir, without having had a look at this vital section of the defence budget.

Then, as you point out, just when is the end of the session? This is rather a nebulous date, and I suggest we should go at a reasonable date, recognizing we are not certain when we are going to conclude the business of the house. I think this matter of NATO should receive some priority by the committee members.

The CHAIRMAN: Will you proceed, Mr. Winch.

Mr. WINCH: Mr. Chairman, you have asked that members of the steering committee express their opinions on this proposal, and I am quite prepared to do so.

I can fully appreciate what Mr. Hellyer has said, particularly his reasons for putting forth a certain point of view.

I can assure you, Mr. Chairman, that since our steering committee met, I have been giving a great deal of thought to the steering committee's recommendation, which is now before this committee.

Normally, I would oppose such a visit, especially if it could be interpreted, in any way, as a junket. However, this committee has been given a most important task. I think it is one of the most important responsibilities handed to a committee of the House of Commons for many years.

At our steering committee meeting, we only received something in the way of a general statement from yourself, Mr. Chairman. You have now had an opportunity to give a great deal of extra thought to the general statement

you made at the steering committee meeting. If this committee can have the absolute assurance that if members of this committee visit the areas that you have mentioned, that we would be enabled to receive briefings—confidential or otherwise—that would give a clear indication as to the part that our troops are playing overseas, and under NATO, it would be of value. Also, if there could be a clear indication that on such a trip it will be possible to discover not only the actual weapon equipment of our forces but to see at first hand and be able to investigate at first hand, ask questions and receive answers on the correlation and coordination of our troops with others, I believe it would be well worth while.

It is my understanding that if such a trip were undertaken, it would only involve a very small expenditure of money, if the committee were to travel by one of the R.C.A.F. planes.

So, I just recapitulate on this basis, that if the chairman can make it abundantly clear that all particulars will be made available for this committee to see at first hand what is going on—the troop equipment, briefing by some in authority at NATO, then I think it would be a worth while trip for this committee to take.

Now, may I just add—because I fully recognize what Mr. Hellyer had to say—that members of the House of Commons are under very heavy responsibilities, especially right now. As far as I am concerned, this afternoon offers complete evidence as to why I spoke like I did the other day in the House of Commons concerning the increase in hours. This committee is meeting this afternoon. The estimates this afternoon are those that I have been working on for weeks, and for which I would want to be in the House of Commons. So, we have to reach a decision on priority—and that, sir, I have been trying to do, since our steering committee meeting. I have reached the conclusion that if we can have the assurance from the chairman as to the—and I will not say wisdom, because he would not recognize there was not a point of wisdom—but as to the information we can get on the actual field, it will be worth while then, as far as I am concerned.

As the only C.C.F. member on this committee, I have reached the decision that in view of the importance of this committee, the work it was told to do, that I personally am prepared to give it priority—a priority, much as I regret having to be away from other committees, and the house, in order to do a job on this committee.

I feel that I do not want to make any judgment until all evidence is in hand; and if we can get additional evidence, by making the trip, then it would be of assistance to me in reaching a decision before we put in a report.

So far as I am concerned, I can only repeat what I said two weeks ago—that I am not prepared to make my position known on a report to the House of Commons until I have all evidence. So, in thinking this most difficult matter over, and having a most difficult decision to make, my decision is, so far as I am concerned, that I am prepared, under the conditions I have laid down, to go along with the suggestion of this trip.

The CHAIRMAN: Well, I can assure you—and the minister, I know, will reassure you, once I am through, that everything that you asked for will be made available to us. Is that not right, sir?

Hon. G. R. PEARKES (*Minister of National Defence*): I do not see how classified information—secret information regarding operational plans—can possibly be given to a committee of this nature.

The CHAIRMAN: I do not think for a minute that Mr. Winch meant classified information. Did you, Mr. Winch?

Mr. WINCH: What I want to know is this: is there any information at all that can be completely substantiated which cannot be given here? If not, then



there is no sense in this committee spending its time, or the taxpayers' money, going on the trip. However, if there is some advantage to this committee, of an unbiased nature, in being able to both see and talk to people overseas who will give us a greater understanding and clearer picture, in order to make our decision before we make our report, then I am prepared to vote in favour of the trip. But, if this information can be given here, there is no sense to it.

Mr. PEARKES: If you went to SHAPE headquarters, I am quite certain that the general concept of NATO, the composition of NATO, the organization, the administration of it, would be explained to you, using charts not dissimilar to those charts which are in the little blue books we issued last week. You would have an opportunity of seeing the conditions under which the officers are working, and you would have every opportunity of talking to those officers.

I am quite certain that General Norstad, or one of his senior officers, would explain to you the general background of NATO. Then you could go to the air division, and could visit one or more of the wings, according to the time that you are prepared to put to it. They could show you the equipment that they have, their living conditions and, in general terms, suggest, as I have described to you here, what their strike reconnaissance role was, and that sort of thing. Then, you could go to the brigade, and you could see the conditions under which the troops were living. You could see the actual troops, and you could see the equipment that they had. However, I do not think that you should expect to be told the operational role of that brigade. That is of a secret nature, and I do not think any commander would feel free to disclose that to you.

Mr. WINCH: If this committee, or a group of this committee, went overseas, how far do you think that those overseas could go in giving us some explanation in order to show us the position of the Canadian forces there, to assist us in arriving at a decision when we pass on the estimates which are now before us? Would it be of help to us in reaching a decision?

Mr. PEARKES: Undoubtedly, it would be a help to you, because you would see the actual personnel. It is much easier to visualize 5,500 men, and what they are capable of doing, if you have seen them on the ground and seen the equipment they have there.

The CHAIRMAN: Do you have a question, Mr. Smith?

Mr. SMITH (*Calgary South*): Mr. Chairman, I have a question which is relevant to this.

Surely it is not inconceivable that in committee hearings there may be an occasion when this committee may request, and should receive, a confidential briefing on deployment of Canadian home forces. It is not inconceivable; it has happened on many occasions in the past. Surely, sir, it is not inconceivable, by the same terms, that in this committee discussing problems and the role played by Canadians, that we will be advised, and rightfully so, that the briefing is of a restricted nature. I am not speaking of the international aspect; but in discussing with senior Canadian military officials—who, after all, are the first we would like to see—we would like to be advised when this is an open briefing and when this is a restricted briefing. Is that not so?

Mr. PEARKES: As I say, I do not think that the commander of the Canadian brigade would feel that he could explain to your committee that if there was an advance, or invasion, "it is the role of this brigade to fall back to there", or, "to advance to there", or to take any other particular course of action.

They are there to carry out the instructions of an international commander, and I do not think that he would be entitled to say, "My secret plans, in the event of an invasion, are to do this", or, "to do that".



Mr. WINCH: I do not think anyone in this committee wants to go into any of that kind of detail. But the point is, can we, as a committee, if we were to do this, learn something of real advantage that is going to help us in being able to discuss the estimates?

Could I also ask this, in addition to that? If that trip were agreed to, could we not, at the same time, have arrangements made for a talk with somebody in authority in the United Kingdom, separate and apart from a straight visit to the European area where our forces are?

The CHAIRMAN: That was not in the original recommendation; but I see what you mean, Mr. Winch.

Mr. WINCH: I feel very close to the United Kingdom, and I hope that Canada is very close to the United Kingdom; and I was wondering whether that would be part and parcel of it, to have a talk with our mother country on defence matters, as an official body of the House of Commons, being a defence expenditures committee.

The CHAIRMAN: That is a suggestion that we have from you, Mr. Winch. Let us hold that for the time being, may we, please? Mr. Chambers, and then Dr. Fairfield.

Mr. CHAMBERS: Mr. Chairman, you read out the recommendation of the steering committee. I did not get, if you said it in there, how long you propose the committee should be away. Is that in there?

The CHAIRMAN: Our original idea was that we would leave here on, say, Friday the 17th. We would be away on Monday at, say, SHAPE headquarters, Tuesday at the Fourth infantry brigade, and Wednesday at Metz. Then we would fly back here Thursday, or Friday, depending on what other side tour there might be, or what side information place there might be.

I think perhaps that could be cut down in time. That would mean we would be away from the house for actually five days. I think that possibly it would help Mr. Hellyer's and Mr. Winch's thinking if that could be cut down some way or other.

Mr. FAIRFIELD: May I make a suggestion in connection with that, Mr. Chairman? This was what I originally intended to say, that this seems to be a time factor that is worrying Mr. Hellyer. If we left on, say, the Friday night, we would be in Paris, at SHAPE headquarters, for Saturday; then we could proceed on to Soest and be there for Monday.

The CHAIRMAN: You mean, get our briefing on the Saturday at SHAPE?

Mr. FAIRFIELD: Yes; and then go back to Metz, leave there Tuesday night, and we would be back here on Wednesday. Then we would only be absent for actually a few days from the house. I know this incurs quite a lot of work; but this is a duty of the committee.

Mr. WINCH: May I just add one word there, Mr. Chairman?

The CHAIRMAN: Certainly, Mr. Winch; go ahead.

Mr. WINCH: If this committee is considering going away on a rush trip there and a rush trip back, personally I am not interested. If we are going away, do the job, or do not go at all.

The CHAIRMAN: We could still do the job. If we left here on Friday, your thought is this: we would get our briefing and complete SHAPE on Saturday in Paris. Then we would use all day Sunday from, say 11:00 o'clock, leave Paris and—

Mr. FAIRFIELD: Go to Soest.

The CHAIRMAN: The fourth infantry bridge. Could you fly from Paris to that, or do you have to take a bus part of the way?

Mr. PEARKES: You can fly from Paris to a point within about two hours' motoring distance of Soest.

The CHAIRMAN: Then we could get down there on Sunday, and have our briefing on Monday at Soest. Then could we leave Soest Monday night, get to Metz Monday night and have our briefing there?

Mr. PEARKES: Yes.

The CHAIRMAN: We would have just as much time, Mr. Winch, except that we would not have any time off that way. We would be completing our original schedule, but we would be working all night and all day—which is still all right; you have to do that when you are in the house.

Mr. WEBSTER: All work makes you very tired!

Mr. PEARKES: You would have little opportunity for seeing things. You would go into a lecture room and be briefed; but you would have very limited opportunities of seeing the conditions under which the troops were living. It would be a very cursory trip.

The CHAIRMAN: We do not want to do that.

Mr. WINCH: If you are going to do a job, do it; if we are not going to do a perfect job, let us stay right where we are.

Mr. SMITH (*Calgary South*): Mr. Chairman, I would like to define what we can accomplish from such a visit which, as Mr. Winch has said, is all-important. I do not for a moment suggest that we be given any tactical information—which I do not think the committee is, in itself, particularly interested in—as to strategy in the event of an emergency.

Let me try to frame it another way, sir. There are those people within this country, and within the framework of the western world—let us say, within Canada, who questioned the usefulness, as an example—and it is just as an example—of the brigade existing within the framework. I am not one of them. But we would have, as an example, something more than an illustration, something more than the purely logical arguments that NATO is a partnership and we must make a contribution. We would have factual examples of its work and the integrated function of the air division within the larger scale division. These are the aspects on which I think the committee should have some education, in order to carry out and make this examination.

There is nothing within this that is going to be of a restrictive nature, is there?

Mr. PEARKES: I am quite certain they will be very pleased to tell you all about the organization, and I will make no limitations, as far as your visiting the Canadian forces is concerned, other than that of discussing operational policy.

Mr. SMITH (*Calgary South*): Thank you, sir; that clears it up.

Mr. PEARKES: And that, no commander would have a right to do.

Mr. SMITH (*Calgary South*): I appreciate that.

The CHAIRMAN: I do not think anybody in the committee would expect that he would.

Mr. PEARKES: They can tell you the organization; they can show you the equipment they have; they can show you the type of troops they have; they can show you the accommodation they have. And when you are at NATO I feel quite certain that General Norstad will give you a talk on the general background of NATO, the responsibilities, and the value that he places on Canadian troops being there.

Mr. SMITH (*Calgary South*): Thank you, Mr. Minister.

Mr. PEARKES: I am not going to say that he will do very much more than he has done when he has been here and spoken—both he and General Gunther—to members of parliament in the railway committee room, as you will recall.

The CHAIRMAN: Just getting it on a time basis, perhaps I could ask you a few questions, Mr. Minister. Do you believe that if we left here on Friday we could, with no trouble, complete our SHAPE investigations on Saturday?

Mr. PEARKES: No, I could not say that at all, because normally I suppose SHAPE would be functioning with a limited establishment on a Saturday, and General Norstad might not be there. But I think he would try and meet your request.

Mr. WINCH: May I say this, Mr. Chairman, before we continue with this discussion. If you are going to consider a hurried-up trip, as far as I personally am concerned, it is out. If you are going to go over, do the job, or do not do it at all.

The CHAIRMAN: You must realize, Mr. Winch, that I, too, would like to do a job, the same as you. If we can go over and do the job that we want to do in four days away from the house, that is what I am trying to find out now, whether we will be five days away from the house; but always keeping in mind that we want to do the job that we are going over to do.

Mr. PEARKES: I would say, Mr. Chairman, that you would want one full day for SHAPE, and that you could not have less than one full day at SHAPE. If you have been travelling all night in an aeroplane, you will not feel very fit the next morning. If you could, let us say, start on Monday, you would go one night, and I would say it would pay you to have the next day to settle in.

Supposing you went on a Saturday, for example: I would say, go to SHAPE first thing Monday morning and spend all Monday there. Then, if you go to the air division, you would certainly want to go to Metz, the headquarters, and I think you should see one or other of the wings. That would take you two days.

I do not think you could do the brigade and really get value out of it unless you had the better part of two days there.

The CHAIRMAN: That is what I want to know.

Mr. PEARKES: And that would mean coming back the following day.

Mr. WINCH: In other words, if the job is to be done, you have to figure on being away, including travelling time, a week; otherwise it is nonsense.

Mr. PEARKES: I would say that—I am taking the minimum time—if you left on a Saturday, you could do SHAPE on Monday; you could do the division on Tuesday and Wednesday, and on Thursday and Friday you could do the brigade. Then I would think you could get away either on Friday night from Dusseldorf, or Saturday morning, whichever suited your convenience. If you got away early Saturday morning, you would be back in Ottawa at about midnight.

The CHAIRMAN: That means a complete week, gentlemen. Mr. Baldwin, do you want to say something?

Mr. BALDWIN: No, Mr. Chairman; my point in this direction has been covered.

Mr. CHAMBERS: Mr. Chairman, I want to make one comment on what Mr. Winch said earlier about the British. I am very fond of them too. We had the British minister of defence out here not long ago, and I think one thing we would find would be that any British official would be very reluctant to comment on the area of Canada's defence policy. Our own officials in



Europe could give us the information, and the people at SHAPE could show us how the Canadian effort fits into the general NATO effort. But if we asked some British officials to comment—

Mr. SMITH (*Calgary South*): That was never suggested.

Mr. CHAMBERS: —on defence estimates of Canada, I do not think they would do it. There are, of course, British officials at SHAPE who would talk to us on their position at SHAPE.

Mr. SMITH (*Calgary South*): I would be quite happy, Mr. Chairman, to move the adoption of the steering committee report, with the recommended itinerary.

The CHAIRMAN: Is there a seconder for that?

Mr. WINCH: I am sorry; what was the motion?

Mr. SMITH (*Calgary South*): I said that I would be happy to move the steering committee's report, with the suggested itinerary.

Mr. WINCH: I understand, Mr. Chairman, that it would take approximately a week.

The CHAIRMAN: Yes; we would leave on either Friday or Saturday, and get back on the following Saturday—which is a full week, Mr. Winch.

Mr. WINCH: Mr. Chairman, I think I have made my position fairly clear as to my views, and in view of your statement as to what the purpose is and what would be accomplished, and in view of what the minister has said, that outside of everything which is a matter of high security, we would have every opportunity to discover what we want—under those assurances from the chairman and the minister, I will second the motion.

The CHAIRMAN: Thank you, Mr. Winch. Again, I plead for 100 per cent ayes on this, Mr. Hellyer. Do you have anything to say on the motion? I know how you feel.

Mr. HELLYER: I can only reiterate our position, Mr. Chairman. As I said before, I personally think that this trip is worth while to the members of the committee. I think it is something that is worth doing, and worth doing right.

It is strictly a matter of timing. The session is now well on, and people are beginning to get tired; and there is still a great deal of important work to be accomplished, much of it just recently introduced, and some still to be introduced. These include such things as the bill of rights, the combines legislation—which is to go through committee next week, and I understand it will be in committee almost every day next week—the estimates that we are just nicely getting started on, the Judges Act, the rules and procedure, and many other things of considerable importance which take a lot of work.

In addition to that, as you know—and it is no secret—some of our members are off doing other things.

The CHAIRMAN: In little provinces!

Mr. SMITH (*Calgary South*): This is the tragedy.

Mr. HELLYER: When I said "some of our members", I meant some of the members of the House of Commons. I do not think it is exclusive to any particular section. It is difficult to muster a sufficient number of people to carry out this tremendous amount of committee work. Indeed, in the last few days there have been a number of committees—this is not one of them—which have waited a considerable length of time to obtain a quorum. There was one committee which was not able to meet, because it did not have a quorum.

It seems to me that we have just picked the wrong time of the year to do this; a time when we are both subject to fatigue and when there is so much work to do, and it is just going to be difficult to keep going till the end of the session.



Mr. WINCH: It is a matter of priorities, Bill.

Mr. HELLYER: Mr. Winch has stated, correctly, that it is a matter of priorities, and I am not convinced that it is of sufficient importance that we should take what is probably one of the most critical weeks remaining in the session.

The CHAIRMAN: Your original suggestion, that we go on after the house prorogues, I do not think is possible, because we are a special committee, and no longer are we a committee once the house prorogues. We will have to have our report in before the house does prorogue.

Mr. HELLYER: Of course, Mr. Chairman, you are assuming that the house is going to prorogue, and not adjourn. Also, I think you are overlooking the fact that it will take some weeks of discussion—certainly at the rate of two meetings a week—to complete the deliberations of this committee.

The CHAIRMAN: We are going to accelerate that. You know we discussed that.

Mr. HELLYER: I think it is relevant. That means that either we will be operating here until well into the summer, or else, if we are still constituted, during the period of adjournment. I would think we could pick a time which would be mutually convenient, when there would not be the rush and harassment that there is at the present time.

The CHAIRMAN: Have you any thoughts as to when that should be?

Mr. HELLYER: Not offhand. I would be willing to discuss it further, if the decision is postponed.

The CHAIRMAN: Would anybody else like to comment on the motion?

Mr. LAMBERT: Mr. Chairman, on the question of convenience, there may be members of this house who feel that, if there is to be an adjournment, they have other matters to which they would perhaps like to give just as high a priority.

The CHAIRMAN: The Chair would like to point this out also, I think this trip is of so much more importance than our politicians, or our confreres, visiting some of these places which they have been visiting in the last few weeks, and will be in the next few weeks.

I think, as Mr. Winch says, it is a matter of priority, and it seems to me that when we are checking into the dollars, and when we know that, we will be able to make better recommendations. That is why I personally recommended it.

Mr. SMITH (*Calgary South*): We will be in a better position to decide when we have had the recommendations from the steering committee.

Mr. CHAMBERS: It may be, notwithstanding the adoption of this motion, that, for personal or other reasons not every member of the committee will be able to get away and this may affect Mr. Hellyer's thinking. The members of this committee have been regularly in attendance at the meetings. I am not sure that we have ever had a full membership present at any one meeting. The committee could make the trip under strength. I am suggesting that it would not be a good idea at all to make the trip without a representation from each party.

The CHAIRMAN: I would rather that the committee attend in full strength. I doubt that we will have a full complement, as we never have had in the past. However, if we do decide to make this trip, provided this motion is carried, I feel that we should have as close to a one hundred per cent complement as possible.

All those members in favour of the motion made by Mr. Smith will you please raise your hands?

Those members who are opposed.

Mr. HELLYER: I would just like to register our abstention.

Motion agreed to.

The CHAIRMAN: I declare the motion carried.

Mr. WINCH: Mr. Chairman, it is still not definite, notwithstanding that this motion has been passed by the committee, that this study will be made; but if the study is made during this trip I would like to ask that yourself, as chairman, in consultation with the minister, in view of the fact that there can be nothing seen nor heard that cannot be discussed in this committee in our consideration of the estimates, that consideration be given to the possibility of inviting one or two representatives from the press gallery to be in attendance.

The CHAIRMAN: That will be considered by the steering committee and the minister prior to that time.

Gentlemen, to carry out this trip a motion is necessary to ask the House of Commons for permission to adjourn from place to place. I would like to have a mover and seconder to a motion to the effect that a recommendation be made to the House of Commons that this committee be empowered to adjourn from place to place.

Mr. WEBSTER: I would so move, Mr. Chairman.

Mr. PARIZEAU: I would second that motion, Mr. Chairman.

The CHAIRMAN: Thank you.

Would all members in favour of this motion indicate in the usual manner? Are there any contrary to the motion?

Motion agreed to.

The CHAIRMAN: I declare the motion carried.

Thank you gentlemen. We will now continue with the minister's statement.

Mr. WINCH: Mr. Chairman, I am sorry I had to leave a little early at the last meeting. Before the minister starts with his statement, could I ask him if he is now in a position to provide the information that I requested having regard to Canada's authority to send troops overseas and engage in a local war?

Mr. PEARKES: That information was provided at the last meeting.

The CHAIRMAN: You will find that information at page 237. Do you have a copy of the proceedings of that meeting?

Mr. WINCH: No, I have not.

The CHAIRMAN: We have an extra copy here Mr. Winch. You will find that information at page 237 about half way down. Possibly you would like to read that? You may perhaps have some supplementary questions.

Mr. WINCH: You may as well proceed now.

The CHAIRMAN: Mr. Minister, will you continue?

Mr. LAMBERT: Mr. Chairman, have we finished questions in regard to NATO?

Mr. CARTER: I understood we were to keep that subject open.

Mr. LAMBERT: I believe it was decided that the minister would continue with the third phase and come back to questions in regard to NATO.

Mr. SMITH (*Calgary South*): I would like to ask a question at this point, Mr. Chairman, without making an assertion.

The CHAIRMAN: Yes, go ahead.

Mr. SMITH (*Calgary South*): I was just discussing with my colleagues here the advisability of going into a detailed examination in regard to NATO until such time as we have taken this trip to review the function of NATO. I am not presenting obstacles; I am just putting this forward for consideration.

The CHAIRMAN: I would imagine, Mr. Smith, that it would be advisable to do that because some of our questions will probably be answered in a more intelligent way following that trip, and perhaps a lot of questions will be answered over there.

Mr. SMITH (*Calgary South*): That was my point.

Mr. HELLYER: Does the minister have his NORAD statement here today?

Mr. PEARKES: Yes, I do.

The CHAIRMAN: Have you got that statement here today?

Mr. PEARKES: I have it here with me. It is printed here.

The CHAIRMAN: Are you referring to the NORAD statement?

Mr. HELLYER: Could we do that now in detail, Mr. Chairman, in regard to NORAD and put general questions at this time?

The CHAIRMAN: I think that would be a very wise procedure.

Mr. WINCH: I have several questions I would like to ask with respect to NATO.

The CHAIRMAN: That subject remains open.

Mr. Minister, would you give us your statement in regard to North American defence, which is really more than NORAD, I would imagine?

Mr. WINCH: I understand, Mr. Chairman, that while we are going to deal with NORAD, we will still be able to come back and ask questions on NATO?

The CHAIRMAN: Yes, the NATO subject will remain open, Mr. Winch. The discussion in regard to the United Nations is the only subject that is closed at this time, provided your questions have been answered satisfactorily.

Mr. Minister, if you will proceed now, please.

Mr. PEARKES: This deals with the defence of North America and NORAD commitments.

It is only in comparatively recent years that the threat of an attack against the North American continent has become a reality. Cooperation in mutual defence between Canada and the United States has a short history. It was not until after the outbreak of the war in 1939 that tentative steps were taken with a view to establishing means of consultation between our two countries regarding the defence of this continent. As you know, these preliminary contacts led in August 1940 to the agreement between President Roosevelt and Prime Minister Mackenzie King, known as the "Ogdensburg Declaration".

Subsequently a permanent joint board on defence was established and for the balance of the war close cooperation existed between the military forces of our two countries. Following the termination of hostilities, the Canadian government at the request of the United States government agreed that the cooperation in defence which had existed since 1940 should continue in peacetime and a military committee was formed to initiate planning for the defence of North America.

In 1949 the NATO alliance was formed and the Canada-United States region became part of the regional organization. Canada-U.S. defence planning has been concerned largely with the air defence of the region to meet the threat that I have already previously outlined. In keeping with their regional responsibilities to NATO, Canada and the United States form a Joint Air Defence Command known as NORAD, the announcement of which was made in August 1957.



An additional step in mutual defence cooperation was taken in July 1958 with the establishment of a joint ministerial committee to be known as the Canada-United States committee on joint defence consisting of ministers concerned with external affairs, defence, defence production and finance from each country. Two meetings of this committee have already taken place. The next meeting will be held in Canada early next month.

Because of the vital role that NORAD has in the protection of the main component of the deterrent—the aircraft and missiles of the strategic air command—it will be realized that any improvements in the air defences of Canada contribute not only directly to the defence of Canada but should be considered as strengthening the overall deterrent system.

I have on previous occasions pointed out the expense that is involved in developing these nuclear and modern means of retaliation. Even the United States finds it difficult to meet these expenses. They found recently that they had to cut back on some of their air defence appropriations for the defence of the North American continent in order to provide more funds to improve the forces of retaliation and to close the so-called missile gap. Canada is able to make a substantial contribution for the defence of this continent, even though she may not be able to contribute a great deal in the field of retaliation.

It will be recalled that the commander in chief of the North American air defence command was authorized in his terms of reference to establish subordinate headquarters as necessary for the accomplishment of his mission—the defence of North America against air attack. The NORAD commander has now established these subordinate organizations with the approval of the Canadian chiefs of staff committee and the United States joint chiefs of staff.

The geographical area of Canada and the United States, including Alaska, has been divided into nine air defence regions, each operationally controlled by a regional headquarters. Each region in turn is divided into one or more air defence sectors which are responsible for all of the air defence actions in their respective geographical areas. This organization enables the NORAD commander to maintain centralized control, over all the weapons aircraft and missiles in the air defence system.

Centralized control will be achieved in most regions by the semi-automatic ground environment system referred to as SAGE. The regional headquarters are SAGE combat control centres, and the sector headquarters are SAGE combat direction centres. The large SAGE computers in these centres will give highly trained Canadian and United States officers basic information enabling them to decide the use they will make of the weapons under their control. It should be emphasized that the SAGE computers do not make decisions—these are made by human beings—the officers who are in charge—based on the tactical situation obtained from the SAGE computers. This combination of computers and skilled human beings ensures the positive and complete control of the interceptors and missiles assigned to the system. Targets can thus be identified, selected and, if necessary, destroyed, while simultaneously the necessary warnings are passed to the interested agencies of the two governments, including strategic air command and the emergency measures or civilian defence organizations. This system of centralized positive control assumes far more importance than hitherto following the introduction of new defensive weapons.

The SAGE Computers at the sectors or direction centres are fed information from the various elements of the air defence system including the early warning lines and the airborne early warning stations, as well as from interceptor and missile bases. Each direction centre automatically feeds the pertinent information to the computer at the regional headquarters or control centre. The required information also goes automatically to NORAD headquarters at Colorado Springs.



As I have said, the whole of Canada and the United States including Alaska, has been divided into nine regional areas. Headquarters are situated in each of these areas and are connected with the central headquarters at Colorado Springs and with their subordinate sector headquarters. This interlocking organization permits complete coverage of the air space of the continent.

The manning of the various regions and sectors and the designation of the commanders was established according to certain mutually agreed principles. In areas within one country only and containing only forces of that country, the commander and staff will be drawn from that country. However, if it is necessary to use forces of the other country in the air space of the geographical area in question, staff and operational personnel will be provided to the commander to ensure effective employment of these forces. In those areas containing territory of both countries or forces of both countries the commander and his deputy will not normally be from the same country. It was also agreed that the commander's staff should be a joint staff composed of officers of both countries and that national representation in the NORAD organization should generally be based on the composition of forces and the territory involved.

Of the nine NORAD regions, four lie wholly within the United States—covering the southern areas and also including Alaska—and contain forces of that country only. The remaining five regions include territory of both Canada and the United States and contain forces of both countries.

Based on the above principles therefor, Canadian personnel are being integrated into the command and staff structure at NORAD headquarters, at five of the joint regional headquarters and at ten of the sector headquarters.

At Colorado Springs Air Marshal Slemon is the deputy commander-in-chief of NORAD, and thirty-two other R.C.A.F. personnel are serving on the integrated staff in various capacities. At the northern NORAD region headquarters at St. Hubert, Air Vice-Marshal MacBrien is the commander with both R.C.A.F. and U.S.A.F. personnel integrated on his staff.

The NORAD regional organization that I have outlined is the current situation. However, as new equipment and facilities become available, and particularly as additional regions and sectors are equipped with SAGE, there may be changes in the regional organization and boundaries. Any such changes will of course require Canadian approval if Canadian air space or Canadian forces are involved.

In order to provide effective warning of a possible air attack by manned aircraft, three warning lines have been established. In the far north the *Distant Early Warning* or *DEW Line* stretches from Alaska to Cape Dyer, Baffin Island, and was constructed and equipped by the United States. R.C.A.F. officers now have operational control of those Dew Line sites situated in Canada. Further south at about the 55th N. parallel of latitude is the *Mid-Canada Line* with stations from Dawson Creek, B.C., to Hopedale, Labrador. Its purpose is to confirm information obtained by the DEW Line stations and enable appropriate action to be taken by the control network of the Pinetree system. The Mid-Canada Line consists of 8 section control stations and 90 'doppler' detection stations extending across the country. It was built by Canada and is operated by the R.C.A.F. It is of sufficient distance from the Pinetree system to allow adequate warning for necessary action to be taken. The annual estimated cost for operating the Mid-Canada Line is \$17½ million.

The *Pinetree* system was built and is operated jointly by Canada and the United States. In all there are 34 stations, 20 manned by United States Air Force personnel and 14 by the R.C.A.F. The Pinetree Line extends from Vancouver Island across the southern portion of Canada to Nova Scotia and

on northward through Newfoundland and Labrador to Frobisher bay. The annual estimated cost to Canada for operating our portion of this line is \$19.1 million.

In order to increase the capability of our air defences as previously announced, the government has decided to introduce two squadrons of Bomarc B guided missiles in Canada. These squadrons, together with those sited in the United States, will form part of a chain of NORAD's mutually supporting surface-to-air missile sites protecting the northeast portion of the continent. They roughly might be described as being from Winnipeg to the Labrador coast.

To achieve the maximum effectiveness in the operation of defensive weapons, *SAGE* electronic control and computing equipment is being provided. Measures are also being taken to extend and strengthen the Pinetree radar control system by adding additional large radar stations and a considerable number of gap filler radars and by improving data processing and communication facilities. The cost of these improvements is to be shared jointly by Canada and the United States, with the United States paying, approximately two-thirds and Canada one-third of the total cost. Funds for these improvements are provided in the 1960-61 estimates and are referred to in the information booklet on page 11.

At present the CF-100 all-weather fighter is the Canadian contribution to the manned interceptor forces in NORAD. Of the 9 squadrons equipped with these aircraft two squadrons each are located at St. Hubert, Ottawa, Bagotville, North Bay and one at Comox. While it is realized that the period of effectiveness of the CF-100 is limited, no decision with regard to its replacement has been reached yet. However, the R.C.A.F. has investigated various types of aircraft which might be considered should it be decided to re-equip the squadrons in Canada. The realization that such a decision would involve serious financial implications and the knowledge that there are already a considerable number of interceptors in the North American defence complex, coupled with the changing nature of the threat, requires the most careful consideration before a final decision can be reached. There might be some tactical advantage in introducing a more up-to-date interceptor in our Canadian squadrons at this time but whether such a requirement can be given a high enough priority to justify the considerable expense involved is a matter not yet resolved.

The air defence plan for the whole of the North American continent calls for various types of weapons including both manned interceptors and surface-to-air missiles. But, as I have said before, it may not be necessary for Canada to contribute to *all* facets of air defence.

So far I have been referring to the defences against the threat of the manned bomber. None of these defences are effective against the intercontinental ballistic missile but as long as manned bombers are in the inventory of a would-be aggressor, a defence must be maintained to deter the use of such weapons in an attack on this continent.

In order to give warning of the approach of ballistic missiles a system known as BMEWS (Ballistic Missile Early Warning System) is being set up. Three main stations are being built in Alaska, Greenland—which is nearly complete—and northern England. These radars cover a vast area of the northern hemisphere and can give some warning—even if only minutes of a pending missile attack. Canada is contributing in a small way by the provision of certain rearward communication facilities. While Canada plays no part in the program it might be well to mention here the existence of the U.S. MIDAS (Missile Defence Alarm System). This satellite system is designed to supplement BMEWS at a later date by giving more warning of the firing of



a missile from the Soviet Union. The BMEWS is only able to locate and track the missile after it has been launched. It is hoped that MIDAS, by registering the increased heat required for the discharge of a missile, will be able to give warning that a missile actually has been launched before it is picked up in its flight.

While no defence presently exists against an ICBM a considerable amount of research is under way in this field with Canada playing a not insignificant role.

The advent of the intercontinental ballistic missile (ICBM) raised for the first time the probability of this continent being open to devastating attack in the first few hours of a major war. When this possibility became apparent the Defence Research Board was instructed to see what research programs might be initiated in an effort to assist our allies in devising means for defence against this new weapon.

To counter the ballistic missile, it was obvious that there were several areas in which research would be required. The first of these was detection and early warning and a program was initiated to investigate the usefulness of radar for this requirement.

In the event of an attack most ICBMs are likely to arrive in North America from a northerly direction. A special problem exists here because of the presence of the aurora borealis which tends to play havoc with radio devices. Radar beams can be seriously disturbed when the aurora is prevalent. D.R.B. had for some time been investigating radio communications in the north and was well equipped to undertake a research program involving the aurora. In recognition of this fact, the United States offered to co-operate and loan to Canada a very powerful radar now installed at the Prince Albert Radar laboratory. The scientific program of this laboratory is agreed with the United States authorities but full operational control is in Canadian hands. Much useful data already has been obtained. D.R.B. scientists have also worked out measuring techniques for radio reflections from various types of warhead.

Another D.R.B. program is designed to differentiate between a warhead and the other parts of an ICBM rocket which would be in space when such missiles have been fired. In particular, I might mention a program at the Canadian Armament Research and Development Establishment where projectiles are shot at high speed down indoor ranges in tubes in which a vacuum has been produced, thus simulating conditions in the upper atmosphere. This program has been of great interest to our United States partners, and a number of agencies concerned with anti-ICBM problems have been awaiting the results of CARDE tests in order to use them in their own program.

The use of radar for detecting, sorting and tracking ICBMs may well be supplemented or replaced by the use of infra-red or some other means. Programs have been undertaken to carry measuring devices into the upper atmosphere to determine the characteristics of this region, to see what background signals exist which might confuse the detection equipment and to see what range of detection might be expected at such altitudes. Instruments have been carried aloft by aircraft, balloon and rockets. The D.R.B. and the R.C.A.F. now are actively engaged in a co-operative U.S./Canada program with instrumented aircraft in the South Atlantic connected with missile firings from Cape Canaveral. These tests are designed to determine what an incoming ICBM looks like.

When an incoming ICBM has been detected and identified, a missile must be launched from the ground to intercept and destroy it. Time is of the essence and such a missile must be fired at a few moments notice. Many missiles are now using liquid propellants which require considerable time for preparation

before firing. A solid propellant capable of instant readiness is obviously the requirement of the future. D.R.B. scientists have been working for some time in the propellant field and, in particular, have been concerned with low temperature characteristics of such propellants. It is believed that these characteristics will be most important in an anti-missile missile. The work conducted looks very promising.

Small Canadian research rockets will be used for scientific measurements to a height of the order of one hundred miles. However, it is important that the northern regions be investigated at even higher altitudes and the United States National aeronautics and space administration have agreed to make available a satellite firing which Canada will completely instrument, enabling D.R.B. scientists to investigate the areas in which we are particularly interested.

In addition, Canadian scientists are using radio beams sent skyward from earth to explore the upper atmosphere, but the usefulness of this program is limited to a height of some sixty to eighty miles. The Canadian satellite will therefore provide a means for making measurements at high altitudes which will be very difficult and, indeed, sometimes, impossible by other means.

These are the principal areas in which the D.R.B. is conducting research designed to develop a defence against the ICBM. There are many ramifications and details of this program, which is a comparatively large one and a substantial portion of the defence research board staff is involved in research in this area. Because of the very high cost of proposed anti-missile systems, Canada could not possibly develop one of its own. Hence it has seemed best to pool our research resources with those of our bigger partners, in the hope that our combined efforts will produce a defence system which can be set up to protect us all.

In addition to the air defence measures for the regions that I have described, ships and aircraft of the Royal Canadian Navy together with R.C.A.F. maritime forces operating under a Joint Maritime Command, assist in the defence of the North American continent against the threat from the sea. In addition to the 30 naval ships allocated to SACLANT, 14 anti-submarine vessels and a squadron of maritime patrol aircraft are on the Pacific coast, and mine-sweepers and local defence vessels are maintained on both coasts. These ships and aircraft co-operate continually with our U.S. partners to provide a strong seaward defence.

A major achievement in the constant endeavour to improve our anti-submarine defences is the Canadian development of the device known as Variable Depth Sonar. This device was perfected by the Naval Research Establishment on the east coast and contracts have now been let for production.

The three brigade groups of the Canadian Regular Army stationed at home, one in the West, one in Central Canada and the third in the East, provide a force to meet land defence requirements in Canada; the necessary manpower for the rotation of the Brigade in Europe; and trained personnel for the United Nations tasks to which I have already referred when we were discussing Canada's contribution to that Organization. Elements of each of the 3 Brigades have been trained in Arctic warfare and parachute techniques, and could go into action on very short notice. Such forces would be available in the event of any isolated commando type landing by enemy forces.

Mention should also be made here of the part the R.C.A.F. plays in search and rescue operations in Canada and off our coasts. The R.C.A.F. discharges its national and international search and rescue commitments through rescue co-ordination centres and flying units located within each of the search and rescue areas in Canada. There are four such areas—Atlantic, Eastern, Western and Pacific—with rescue co-ordination centres established at Halifax, Torbay, Trenton, Winnipeg, and Vancouver.



The function of the rescue co-ordination centres is to receive, record and evaluate information relating to emergency situations and where necessary to initiate and control search and rescue operations. Each centre maintains liaison with local interested parties, for example the tug boat operators on the B.C. Coast. The rescue units maintain special search and rescue aircraft which are kept in an immediate state of readiness for operational use. Aircraft presently in service for such work are 9 Dakotas, 5 Lancasters, 7 Canso, 14 Otters and 6 heavy helicopters. Ten new amphibious aircraft, known as the CSR-110 or Albatross are being procured to replace the Canso.

Attached to rescue units are parachute rescue teams, comprised of personnel capable of rendering first aid and assisting survivors until arrangements can be made for their rescue. Rescue units maintain supplies of emergency and survival equipment which can be dropped from the air and parties of ground rescue personnel are trained and supported at many R.C.A.F. stations throughout Canada. It might be of interest for the committee to know that in 1959 a total of 144 search and rescue operations concerned with aid to distressed aircraft were undertaken and for the first time since the inception of the search and rescue organization all of these searches were successful. A total of 5,527 hours for the year was flown by search and rescue aircraft on all operations. Perhaps we might pause at this point as I wish to discuss in some detail the role of the Canadian army in national survival operations, and the part that the Canadian army plays in the emergency measures organization, and the part that the Department of National Defence plays in that organization at the next meeting, if it is agreeable. I will have some charts available then which I think would be of interest.

The CHAIRMAN: I am sure it would. Thank you very much. I feel we might be wise, or it would be advisable if we had a chance to digest the minister's statement before asking any questions. And as it was the intention to break up at 5 o'clock. May we call it 5 o'clock.

Agreed.

We shall meet here on Friday morning at 9:30. Thank you.

The meeting adjourned.





JUL 4 1960

JAN 10 1961

JAN 16 1962



HOUSE OF COMMONS  
Third Session—Twenty-fourth Parliament  
1960

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SPECIAL COMMITTEE  
ON  
**DEFENCE EXPENDITURES**

*Chairman:* Mr. G. E. HALPENNY

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MINUTES OF PROCEEDINGS AND EVIDENCE  
No. 11

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FRIDAY, JUNE 10, 1960

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Estimates of the Department of National Defence  
for the Fiscal Year 1960-61

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WITNESS:

The Honourable George R. Pearkes, V.C., Minister of National Defence.

SPECIAL COMMITTEE  
ON  
DEFENCE EXPENDITURES

*Chairman:* Mr. G. E. Halpenny

*Vice-Chairman:* Mr. Roger Parizeau  
and Messrs.

Baldwin,  
Cardin,  
Carter,  
Chambers,  
Fairfield,

Forgie,  
Hellyer,  
Lambert,  
Macdonald (*Kings*),  
Smith (*Calgary South*),

Thompson,  
Webster,  
Winch.

Antoine Chassé,  
*Clerk of the Committee.*

CORRECTIONS

Minutes of Proceedings and Evidence No. 10, Wednesday June 8, 1960.

On page 247 at end of second line, substitute "General Gruenther" for General Gunther;

At page 256, fifth starting paragraph, third line, substitute "Depth" for Dept.

## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

FRIDAY, June 10, 1960.

(12)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Cardin, Carter, Chambers, Fairfield, Halpenny, Hellyer, Lambert, Macdonald (*Kings*), Parizeau, Smith (*Calgary South*), Thompson, Winch.—(13)

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Defence Minister (Finance); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns; Major F. S. Corbeau.

Before proceeding with the Orders of the Day, Mr. Baldwin moved, seconded by Mr. Macdonald (*Kings*),

"That the resolution passed by the Committee on June 8th, to the effect that the Third Report of the Steering Committee be adopted, be now rescinded."

After discussion thereon, and the question having been put on the proposed motion of Mr. Baldwin, it was, on a show of hands, resolved in the affirmative on the following division: Yeas, 10; Nays, 1.

On motion of Mr. Parizeau, seconded by Mr. Lambert,

*Resolved*,—That the resolution passed by the Committee on June 8th, that permission be asked from the House for the Committee to adjourn from place to place, be rescinded.

The Committee resumed from Wednesday, June 8th, consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61.

Honourable George R. Pearkes, V.C., read a statement dealing with the establishment of an Emergency Measures Organization (EMO). During his address the minister was assisted by Major F. S. Corbeau, who indicated on maps displayed in the committee room various points to illustrate the minister's remarks.

At 10.45 o'clock a.m. the committee adjourned to the call of the Chair.

Antoine Chassé,  
*Clerk of the Committee.*





## EVIDENCE

FRIDAY, June 10, 1960.  
9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Mr. BALDWIN: Mr. Chairman, I would like to make a few comments apropos the latter part of the minutes of proceedings of the last sitting. That was the matter which we dealt with in connection with a trip to Europe to inspect the NATO installations.

Since yesterday, particularly, I have had an opportunity of reading the evidence of the proceedings on June 8 last. I have read them very carefully. It seems to me, and you can correct me if I am wrong, sir, that it was the obvious intention of the steering committee that a subject of this kind should have complete endorsement and there should be unabridged unanimity. I think the reason for that is plain. They wanted to leave this out of the arena of partisanship, so that there could be no prospect of future recrimination.

That may have been the objective, but I do not think that is reflected, as I read the proceedings of what was said under the vote. There was an abstention, and I am not going to quarrel with the reason for the abstention, as a matter of fact; when you come to realize the volume of work left ahead, there may be good and valid reason for what Mr. Hellyer and his party have said and the position they took at that time, but in any event there was not the necessary unanimity. I also think there was probably a gap between what some of the members anticipated as being the results they would achieve and what could be accomplished in this mission, keeping in mind the limitations that the minister indicated.

I am not going to say any more at this time, but in my opinion, under all those circumstances, I do not feel that the deliberations of an important committee of this nature would be served under those conditions by proceeding with this mission. I am going to propose that we do not take this trip to Europe as outlined, and to achieve that result I am now going to move that the motion moved by Mr. Smith (*Calgary South*), on June 8, which in effect adopted the third report of the steering committee providing for a tour of inquiry to Europe, be hereby rescinded.

Mr. SMITH (*Calgary South*): Mr. Chairman, I would just like to say a word or two in this regard.

Mr. CHAMBERS: Mr. Chairman, has that motion been seconded?

Mr. SMITH (*Calgary South*): I would like to say a word, if I may, sir.

The CHAIRMAN: Before you do so, Mr. Smith, do we have a seconder for Mr. Baldwin's motion?

Mr. MACDONALD (*Kings*): Yes, I would second it.

Mr. SMITH (*Calgary South*): I cannot agree with the conclusions of Mr. Baldwin, Mr. Chairman. I have no apology to make whatsoever for moving the motion.

At the time the steering committee, if I may remind this committee, thought this trip was important, and we were unanimous—including Mr. Hellyer. The motion read that we should leave on Friday, June 17. Now, sir, I am going to point one thing out to you. It has been suggested by certain gentlemen of the press that this is in fact a joy ride and tour of Europe. I think it should be

understood that after sitting 17 hours or 16 hours in an aeroplane and then having a very hectic schedule of five days looking at what represents two-thirds of the total defence budget, that we would certainly be well informed and would not have enjoyed any particular pleasures that might accompany an ordinary trip to Europe. This would certainly be a working session.

Having disposed of that, the purpose of this, sir, was to go over and have a first-hand look at the most important area of the whole defence budget. It does seem to me, sir, to be unusual that we should now decide that we are not going to place the same priority on it that we did some time ago. For that reason I cannot support the amendment made by Mr. Baldwin.

The CHAIRMAN: Is there anyone else who wishes to speak to this motion?

Mr. LAMBERT: There is some sympathy, perhaps, with what Mr. Baldwin has said, except that I do feel that ultimately we should have a look at the installations in Europe so as to appreciate and recognize their great worth. I feel that some misinterpretation, and a rather flighty misinterpretation was placed upon the motives of this committee in deciding to take this trip. Although I do recognize some validity in Mr. Hellyer's reservations about the trip, I feel that, provided there was a guarantee that we were going to see all the representatives of his party in the house doing the business of the house during this intervening period, there might be some justification for his statement as to the importance of time, and that the going away of this committee at this time is wrong. However, in light of all that, it may be that it would be better to defer the decision to go over, and I would go along with the proposal by Mr. Baldwin to the effect that this is not an irrevocable decision.

The CHAIRMAN: The motion before this committee is that we rescind the motion.

Mr. LAMBERT: That is fine, but in so far as I am concerned I am prepared to reconsider it later.

The CHAIRMAN: Your recommendation is that we reconsider it at a later date.

Mr. HELLYER: I would just like to reiterate the position, Mr. Chairman, that I took the other day. I feel that this is a worth while thing. It is important that the members should see SHAPE headquarters and our NATO establishments at some time, but this is not the time due to the very heavy pressure of business both in the House of Commons and in the committees of the House of Commons.

This morning is a perfect example of that. There are at least three committees meeting at this same hour of 9.30 a.m. The banking and commerce committee is meeting now. I am a member of that committee and I am unable to attend there. The committee of veterans affairs is meeting. Mr. Carter has just been there and has now come to this committee because there is not a quorum there and that committee is unable to do its business. I think this points up and accentuates the difficulty that there is in trying to do all of the things which seem to be heaped on the members of the House of Commons toward the end of the session. The minister has just advised me that he is missing a cabinet meeting. It seems that for the few remaining weeks, if we are going to handle the business before the House of Commons in the way in which it should be handled and considered we have to apply ourselves diligently to it. Perhaps we wish the business could be better spread throughout the months of the year, but there always seems to be a log jam towards the end of the session. I noted in the list of business for next Monday and Tuesday the proposals set up another committee at this late date. The session is almost ended and we now have a new committee set up at this late stage to consider a very important subject. I think this will take all of the time and resources

of all of the members of the House of Commons. I feel that we would be better to defer this trip until we can go and do the job without any qualms of conscience.

Mr. WINCH: Mr. Chairman, I find myself rather torn in two directions. You will remember at our last meeting I did express certain doubts and asked yourself and the minister a series of questions in regard to the advisability of such a trip, and as to whether the committee would be assisted by visiting the various people and locations that the steering committee had in mind. I went along with the suggestion, not only because of the assurance given both by the minister and yourself as to the worth-whileness of this trip, but because I strongly feel that in such decisions the consideration should be on a non-party and non-political basis. I therefore seconded the motion. I have no regrets in doing so.

Having said that, I do want to add my very deep and sincere regret at the facetious, irresponsible manner in which the viewpoint and the decision of this committee was carried in the press.

Some hon. MEMBERS: Hear, hear.

Mr. WINCH: I think the press have done a disservice to this committee and to the people of Canada. I am the only member of my party on this committee. There are 14 members who have different political views than I have, but I believe that in all our meetings there has been a serious approach by all the members to the task that has been referred to this committee. The press have sat in at all times and I thought they would have gathered that we are all intensely interested in trying to do the job and make the study we have been presented with.

I know as far as I am concerned I am going to say that in my estimation no member of this committee had the intention of having a holiday junket at the taxpayers' expense, which is the manner in which it has been reported in the press across Canada. I consider this would have been a most strenuous trip, a strenuous trip indeed, and very tiring and trying to the members who might have been able to attend.

I felt that I should say that and I have said that, Mr Chairman.

In view of the reaction and in view of that attitude I have some doubts as to the manner, henceforth, if we did make that trip, in which it would be reported, whether we liked it or not. There does exist that power of the press, and it could undermine the seriousness and responsibility of the members if that is the attitude which was taken.

Because of what has already been mentioned by other members of this committee, and although I still hold the opinion that it might have been a very worthwhile trip because of the fact that the members would be making first-hand contact, by being able to appreciate and to see where the majority of the money for this department will be going during the next twelve months. This would prove most favourable. I am inclined at the moment to think, not necessarily that it should be rescinded, but that there definitely should be reconsideration as to the value of perhaps making this trip at a later time.

Having said that, I say once again that I am torn in two directions, but in view of the whole picture which puts it in balance at the moment, I will have to go along with the mover of this motion.

The CHAIRMAN: Are we ready for the question, gentlemen?

Mr. CARTER: What is the motion?

The CHAIRMAN: The motion is; Mr Baldwin moves, seconded by Mr. Macdonald (Kings) that the resolution passed on the motion by Mr. Smith on June 8, that the third report of the steering committee be adopted be now rescinded; all those in favour of the motion, would you please raise your hands? May we make it unanimous, gentlemen? Those contrary?

Carried.



The CHAIRMAN: I declare the motion carried.  
Now, may we carry on with our business?

Mr. PARIZEAU: Since the motion of Mr. Baldwin has passed, Mr. Chairman, I would say now that there is no need for the motion on June 8, which requested permission from the House of Commons for this committee to adjourn from place to place. I would therefore move that the said motion be rescinded.

The CHAIRMAN: Is there a seconder for Mr. Parizeau's motion?  
Mr. Lambert.

Is there any comment?

Mr. WINCH: I think this is a matter of importance. I read in the *Globe and Mail* this morning that the Prime Minister was very much disturbed about the decision and that he would cancel the idea. I think, sir, it is of the utmost importance in Canada that it be known whether or not that is correct. I do not believe that the Prime Minister would interfere with the work of a committee. It would be very dangerous and it would be most objectionable if that did happen. I do not believe it did. I do believe, however, that those people who read that statement which was carried by the Canadian Press should know the facts. As I say I do not believe it, but I would like to have it from you as a statement that there has not been any interference with the work of this committee or the plans of this committee by the Prime Minister.

The CHAIRMAN: Mr. Lambert.

I will answer you in a moment, Mr. Winch.

Mr. LAMBERT: Perhaps Mr. Winch would consider that the source of this information is the same source which expressed the view on the attitude of the committee towards the trip, and that perhaps it should be read in the same light.

Mr. WINCH: I think, in the name of our parliamentary democracy and parliamentary system, that it should be cleared up here.

The CHAIRMAN: You will be glad to hear that I have not talked to the Prime Minister except to say hello since this committee started. I have not talked to the Minister except to say hello since this committee started, and I do not intend to do so until the whole proceedings of this committee are concluded.

Mr. BALDWIN: As the one who moved the motion, may I add that my view is that a committee, whose work is as important as this is, like Caesar's wife, should be beyond reproach. When it was indicated that that was not possible and there was not this degree of unanimity, that was the reason for my motion.

The CHAIRMAN: Shall we proceed.

I believe the minister has a statement on plans for emergency survival. If it is agreeable to the committee I would ask the minister to read his statement now.

Mr. CARTER: Might I ask whether there are any more statements?

The CHAIRMAN: This is the final statement.

Hon. GEORGE R. PEARKES, (*Minister of National Defence*): This is the fourth and final statement on general defence policy.

Mr. CARTER: I was going to suggest that if there are many more that we should have them tabled.

The CHAIRMAN: I think we should have this fourth statement then we will go back to a discussion of the statements on NATO and NORAD and then we will have consideration of emergency survival. In having the statements you are able to do a little homework. I think this can save hours.



Mr. CARTER: I suggested that at the beginning, but we seem to be taking up a lot of time in the reading of these statements and I thought perhaps if there are many more they should be tabled.

Mr. PEARKES: This will be the last statement. I thought it would round out the general concept of our defence policy. I am dealing with the emergency measures operations because the Department of National Defence includes in its estimates considerable sums for these particular projects. I thought it would be helpful if I summarized the general emergency measures operations. I have given you a manuscript of what I am going to say. There will be a few changes.

As long as the threat of attack against this continent exists, the government feels that it is only prudent to institute measures for survival which may have to be adopted should our other efforts fail to prevent war. With this in mind, the government has established an emergency measures organization, which forms part of the privy council office secretariat. Its functions include planning for the continuity of government in wartime, planning for the general control of communications in wartime, planning for the wartime control of road transport and the assumption of responsibilities for civilian emergency planning in NATO. In addition, it has the responsibility for stimulating emergency planning among civilian departments and agencies of the federal government generally.

It is essential for the preservation of Canada as a nation that there should be continuity of civilian government in order to provide guidance and leadership, especially in the event of a nuclear attack. Each provincial government must be closely connected with the central federal facilities for emergency government through a highly efficient communications system.

So long as contact can be maintained, the central federal authority will continue direction. If by any chance a region is cut off or isolated, the federal authority situated in a regional centre and working with the various provincial officials concerned will operate within the region. The establishment of these regional centres was announced by the Prime Minister on the 31st of May last, when he said:

Regional centres will be established speedily in each of the provinces. There will be some variation in their size and character, depending on a number of factors including the size of the population to be served, the likelihood of the provincial capital coming under direct attack, and particularly the emergency communications system and its technical requirements. The centres will be limited in size but will be sufficient to ensure the required operational capability.

In some provinces construction will be necessary, while in others modification of existing buildings may suffice to meet the requirement. The principal need is adequate protection against radioactive fall-out, the same peril against which the government is encouraging householders to protect themselves by means of suitable basement shelters. Immediate action is being taken to provide the required structures, and details regarding provincial participation in their use will be the subject of discussion with provincial authorities forthwith.

Funds are provided in these estimates for a start to be made this year on these projects.

In May of 1959 an order-in-council known as civil defence Order 1959, was passed setting out the responsibilities of the various departments concerned with emergency measures arrangements. The Department of National Health and Welfare, which had up to this time been the central authority for civil defence at the federal level, henceforth is charged with general guidance

and policy development for emergency health and welfare services which are, in the main, to be carried out by the provinces. In addition, this department administers the civil defence college at Arnprior, Ontario.

The Department of Justice was given the responsibility for the use of the Royal Canadian Mounted Police in the preservation of law and order and certain aspects of traffic control.

The Prime Minister, through the emergency measures organization of the Privy Council, has the responsibility for certain specific operations of the civil defence programme, including the administration of financial assistance to the provinces and municipalities.

The main assignment of the emergency measures organization in the civil defence field is the general responsibility for co-ordinating all civil defence matters at the federal level. In respect of the re-arrangement of civil defence functions between federal and provincial authorities, it is perhaps most pertinent to point to the lessened responsibility of the provinces for those technical tasks now assumed by the Army and the increased emphasis to be placed by the provinces on health and welfare matters.

With regard to economic provisions, the government has announced the formation in peacetime of the elements of a war supplies agency. This agency, under the Department of Defence Production, will, in time of war, control the distribution and use of essential supplies, their prices, their rationing, as required, and in every practical way make it possible for survivors to have their share of remaining supplies.

Plans for the control of communications are going forward with considerable speed.

In addition, plans for the control of all types of transport—air, sea, rail and road—are being brought into focus by the Department of Transport.

A government committee known as the cabinet committee on emergency plans has been established. As Minister of National Defence, I am chairman of this committee and the other members are the Ministers of Finance, Trade and Commerce, National Health and Welfare, Defence Production, Justice, Associate Minister of National Defence, and the minister without portfolio.

This committee is responsible for considering major matters of policy connected with emergency plans and for processing these matters to the cabinet.

Certain responsibilities with regard to survival operations were assigned to me as Minister of National Defence by the above mentioned order-in-council and have been re-assigned within my department to the army, which will be supported by the royal Canadian navy and the royal Canadian air force with the defence research board providing the necessary assistance in the field of research.

The responsibilities which I have been given are as follows:

- (a) provision of technical facilities and operation of a system to give warning to the public of the likelihood and imminence of an attack;
- (b) determining the location of a nuclear explosion and the patterns of fall-out, and giving the necessary warning of fall-out to the public;
- (c) assessment of damage and casualties from attack and fall-out;
- (d) controlling, directing and carrying out re-entry into areas damaged by a nuclear explosion or contaminated by serious radioactive fall-out, decontamination work in those areas, and the rescue and provision of first aid to those trapped or injured;
- (e) direction of police and fire services in seriously damaged or contaminated areas which are the object of re-entry operations, including the control of traffic and movement of people in those areas;—I stress the words "in those areas".

- (f) direction of municipal and other services for the maintenance and repair of water and sewer systems in seriously damaged or contaminated areas;
- (g) provision of emergency support to provincial and municipal authorities in the maintenance of law and order and in dealing with panic or the breakdown of civilian authority;
- (h) maintenance and operation of emergency communication facilities.

The regular and militia forces of the Canadian army have been organized now for survival operations, and those forces located in Canada at the time of the attack which are not involved in priority tasks in the direct defence of Canada would be available for survival operations.

The Canadian army has initiated a series of inter-related studies whose purpose is to examine various facets of the survival problem in considerable detail. The fields being examined include possible situations involving radiation, the fire problem, control of movement in stricken areas, re-entry and heavy rescue operations, route clearance, damage and casualty assessment, decontamination problems, reconnaissance and monitoring, food, fuel and manpower sources for rescue forces, direction of municipal services, and command and control during such operations.

The command of the armed forces employed in survival operations will be exercised by the chief of the general staff and delegated as necessary to general officers commanding commands. Command of naval and air force units operating in their normal service roles to supplement or support army operations will be vested in a commander of the service concerned. This commander will be responsible to the army officer-in-charge of the operation. The commitment of those forces assigned to specific national survival tasks will normally be made on the decision of the general officer commanding the command affected, or by an Area or other local army commander in the event of the interruption of communications. Because the tasks in the event of a nuclear attack are assigned as direct responsibilities, there is no need to await a formal request from the provincial authorities, as would be the case when assistance is required for disaster not described as a national emergency. However, since the provincial authorities are responsible for certain aspects of civil defence, survival operations conducted by military forces will be closely coordinated with provincial civil defence authorities.

The major tasks of the army fall into three main categories: firstly, the provision of technical facilities and the operation of a system to give warning to the public of the likelihood and imminence of an attack; A national warning network emanates from a federal warning center to all provincial warning centers, and thence down to the lower echelons of the population. Secondly, there is provision for obtaining, plotting and disseminating information concerning fall-out. The warning system and the fall-out system both have required considerable expansion in the communication resources of the army and a considerable increase in the Royal Canadian Signal Corps. Thirdly, planning for and operations in connection with re-entry into disaster areas that have been subject to nuclear attack.

With regard to the warning system, to be effective, such a system must be designed to collate, evaluate and disseminate all pertinent information and technical intelligence about the many activities which are likely to result or capable of resulting in casualties to the Canadian population. The system must make provision for immediate access to all relevant sources of information such as the NORAD air defence warning system and military intelligence and other appropriate agencies. It must include elements capable of evaluating the probable effects of enemy aerial activity on the civilian population and the means of disseminating warning and related information and instructions to the public. The army's national survival attack warning system commenced operations on the 1st of September, 1959. Canadian warning officers are now



on duty at Ottawa and at warning centres situated in each of the provinces. The dissemination of alerts will be by siren signals coupled with radio broadcasts over networks in the provinces. The responsibility for provision, operation and maintenance of sirens has been assumed by the army, together with establishment of the essential communication links to civilian radio stations in the provinces.

The cost involved in the establishment of the warning system and the provision of such networks as are necessary for central sirens and providing links to the initial numbers of radio broadcast stations, during the current and the next fiscal year, is approximately as follows: In this year's estimates \$650,000; in 1961-62 the forecast is \$970,000.

In this connection, I might mention that the government, after due consideration of the problems of arranging for an effectual government control of the national telecommunications system under nuclear war conditions, came to the conclusion that to make the best use of the telecommunications systems available after nuclear attack for the use of the government and those various agencies and private users with essential functions, it was necessary to develop an emergency organization for planning and operation to control and administer the national communications system, including radio and television broadcasting. This organization will be known as the emergency national telecommunications organization, or ENTO, and it will be developed within the Department of Transport and be under the control of my colleague, the Minister of Transport. This organization will be advised by a committee of senior representatives of other government departments having a major interest in telecommunications.

In carrying out the task of disseminating warning to the public in the smaller centres of population, the assistance of local police, fire services and other provincial and municipal bodies will be necessary. In such circumstances, the overall responsibility will continue to be vested in the army with the other agencies acting on the army's behalf. It is the intention of the government to expand the siren network within the provinces and to provide alternate means of communications to those now in being to ensure the means of warning the public in an emergency.

The second major army task, that is the provision for obtaining, plotting and disseminating information concerning fall-out presents problems of considerable magnitude.

To be effective the nuclear detonation and fall-out reporting system must be in being and staffed on a 24-hour basis. The system must include:

- (a) Nuclear detonation and reporting posts located around our probable target areas.
- (b) Provincial nuclear effects analysis centres, located with our provincial warning centres and supplied with relevant meteorological data necessary in the assessment of the predicted radio-active fall-out from detonations over our own probable target areas and those adjacent targets in the United States. These analysis centres must warn the public of probable fall-out patterns, inform the federal authority of detonations and immediate effects, and likely fall-out predictions on basis of measured intensities.
- (c) Radiation intensity reporting posts throughout Canada designed to provide the provincial analysis centres with a continuing report of radiation intensities as they occur.

The nuclear detonation and fall-out reporting system proposed by the army envisages the establishment of up to 2,000 radiation reporting posts across the nation, of which approximately 200 will be in northern Canada. If you look at the map of Canada it shows the various radiation reporting posts which it is proposed to establish.



Those rather elongated additions to the map are the actual mapped fall-out areas which would be affected if there was a bomb burst at certain designated centres.

The bomb bursts in these cases would be at a point near Edmonton, where it is indicated, and down in the south, near Windsor—and those are the checked areas which would be affected.

Mr. HELLYER: Could the minister indicate the mapped fall-out from one size explosion?

Mr. PEARKES: I would ask Major Corbeau to show that.

Major F. S. CORBEAU: This is a five megaton yield at a height of burst of 850 meters; Edmonton, 5 megaton yield ground burst; Windsor, 5 megaton yield ground burst; Ottawa, 5 megaton yield, height of burst 850 meters.

Mr. PEARKES: I might say that in the populated areas south of that black line, the characteristics of normal fall-out patterns will necessitate that these radiation reporting posts be located on a 15 by 45 mile grid, running east and west. The reason we have so many of these reporting centres is to get a complete pattern of the fall-out. The resources of the army and those of the other services combined cannot provide the geographical coverage necessary for such an undertaking. Therefore, co-operation will be necessary on the part of various federal government departments, provincial and municipal agencies and volunteer civilians, and possibly some commercial elements, to provide an effective system.

We are maintaining a service of warning of possible fall-out throughout Canada, that is if bombs have exploded in any particular area of the North American continent, we would be able to predict the area in which there might be danger from fall-out. It does not necessarily follow that a bomb would have to fall in Canada for there to be a fall-out danger; a bomb could fall south of the border. Fall-out comes some time after the actual explosion and a very wide area may be covered.

In order to maintain such a warning system, we have in Ottawa and in various centres throughout Canada large maps covered with a special grid system. We receive word every day, sometimes two or three times a day, from the weather reporting systems, which inform the centres of the rate of the wind at various heights and direction of that wind. When the cloud forms thousands of feet above the earth's surface and the particles begin to approach the earth, the direction of fall-out is determined by the way in which the wind blows. Of course the wind is not constant at different heights. You may have a wind blowing much faster, say, in a northwesterly direction a few thousand feet above the earth's surface, whereas higher up the direction of the wind may be quite different and the speed quite different, so that as the particles fall down they might drift in one direction between twenty and thirty thousand feet, and below, at 10,000 feet, they might drift in another direction. Reports are obtained from the various Department of Transport centres across Canada every day. Selecting some thirteen places where a bomb is hypothetically assumed to have exploded, a chart is kept of the fall-out patterns every day.

By means of a code made possible by the uniform grid that I have mentioned, information concerning these patterns can be exchanged between the various centres very quickly and can be replotted as and when required.

It is very likely that there may be some time elapsing between the time of the explosion and the time of the fall-out. On the various fall-out patterns are drawn a number of lines showing the approximate time that fall-out from such a hypothetical explosion would reach a particular point. This information would be communicated to the areas affected. The pattern is continually revised by service officers, thereby training a large number of regular

personnel in the method of calculating these fall-out patterns. We are ready now at any time to provide such information, if needed, if an emergency occurred.

Mr. LAMBERT: Is the minister in possession of charts which might illustrate this particular aspect to which he has been referring, concerning the fall-out pattern, and the grid system that is in use at the present time?

The CHAIRMAN: A chart that might be reproduced in the evidence

Mr. PEARKES: Yes. If you look at that map, you will see the chart system covering, roughly, the province of Alberta. You will see, within that area, the red lines which are marked. There is an area there called E.K., and the other areas are F.K. and G.K., which cover other parts of Canada. Now, in all the provincial centres, they have maps marked on exactly the same grid. It does not matter what the scale of the map is. By giving the E.K., and then referring to the letters of the square, say JG59 you would be able to report the exact position to other centres. You would be able to give the anticipated or the reported area of fall-out. The reporting stations, which are shown there, would report that there is or is not fall-out in that particular area. This would then give the exact pattern of the fall-out, which would be most useful in advising people where to move, if they were going to move from any particular centre—or whether they would be in danger; and as one can estimate the time that it takes for the particles to descend, you would be able to make an estimate of the time that the fall-out would arrive—take, in that large chart there, shall we say, at Battleford, which might be three or four hours after. You know the general pattern of the wind, and you can estimate the rate of fall-out. Therefore, you could predict that, say at Wainwright, the fall-out would be there, say three hours after the bomb explosion took place.

The CHAIRMAN: Would you continue, Mr. Minister.

Mr. PEARKES: So, we have today, in conjunction with the current 24-hour operation for the army attack warning system, the federal and provincial warning centres, which are computing fall-out, as related to possible nuclear detonation over probable Canadian and adjacent United States target areas on a twice daily basis.

In addition, there is an urgent need for ensuring the rapid and effective exchange of nuclear detonation and fall-out data with the United States. Obviously, if a bomb fell close to the border, the fall-out might drift across into Canada. Therefore, we keep in close liaison with the organization in the United States.

This can be done through the established agencies.

The responsibility of the army concerning assessment of damage and casualties from attack and fall-out will be limited to estimating the percentage damage and casualties in the areas affected. A working group has been set up under the auspices of the Emergency measures organization and consists of representatives from each of the departments concerned. The type of information needed and the urgency with which it will be required and the area to which it should apply, is being determined by each department. The results will be reported to the cabinet committee on emergency plans. The types of system for damage assessment can then be determined.

We have not got to that stage yet.

The third major responsibility the army has is for re-entry operations into areas damaged by nuclear explosion or contaminated by serious radioactive fall-out. The regular army and the militia are being equipped and trained for such re-entry and rescue operations. The strength of the army, both regular and reserve, limits the number of personnel available for these tasks.



Present estimates suggest that many thousands of civilians could be required to assist in survival operations in addition to the personnel available from the services. Responsibility for training and organizing these personnel—and these are civilian personnel—rests with the provinces and municipalities. In the event of disaster, the activities of civilians trained in rescue operations will be controlled and directed by the army in those areas which have suffered from nuclear attack or been heavily damaged. It is planned to employ the armed forces on survival operations in fully mobile units which would be self-contained, for limited periods, and capable of reentering damaged or seriously contaminated areas to rescue those who are injured or trapped, as well as assisting in the maintenance of law and order and guarding of vital points.

These mobile units will be formed mainly from armoured regiments, artillery regiments or infantry battalions. The whole of the Canadian army stationed in Canada has now been organized into mobile columns, so that they could move rapidly to any areas where there had been destruction caused. There are over 22 such regular columns, as well as 44 mixed regular and militia columns now in training. They may vary in their composition, but their average strength would be over 800 men in each column. They are equipped or being equipped with rescue material, some of it very simple and elementary, such as special rope, jacks for raising up debris, ladders, first aid kits and various radiac instruments which will enable tests to be taken at any time—and there are others far more complicated.

Every man will be equipped with a small button, which can be tested from time to time, to show how much radioactivity he has been subject to. In addition, these columns will be equipped with special firefighting materials. They will have field kitchens and various wireless equipment. The columns will also have specialized equipment such as: mobile water tanks, repair vehicles, trucks fitted with welding and cutting equipment.

Plans are also under way to obtain a supply of portable floodlights, auxiliary generators, centrifugal pumps, special air breathing equipment, further radiac equipment, including sets that can be used from the air, from vehicles and which will detect radioactivity from some distance. The wireless facilities will be increased with the provision of the U. K. manufactured C42 VHF set, which is now on order. This is the most modern military radio set of its type available.

Training for survival operations is a part of normal army training and, as such, is included in individual and collective training programs. The technical services of the army will assist in, and advise on, the decontamination of personnel, water supplies, clothing and equipment. The army will direct clearing operations and all available service heavy engineering equipment will be committed and will be augmented by civilian equipment where possible.

In the initial stages, military and service resources will be coordinated by the army and, while the provision of medical supplies is a main responsibility of the Department of National Health and Welfare, the forces medical services will provide initial medical treatment in re-entry areas and will advise and assist in evacuation, including decontamination of the injured.

While the army would not take over the function of police, fire and municipal services in seriously damaged or contaminated areas, they would be responsible for the over all supervision in areas subject to re-entry operations.

It must be recognized that the provision of emergency support to provincial and municipal authorities in the maintenance of law and order and in dealing with panic or breakdown of civilian authority in the event of a nuclear attack is a new task for the army only in the sense that it would be of greater magnitude than we have ever experienced. The armed services have always had the responsibility for providing assistance to civil authorities in the maintenance of law and order, this of course is only on request or when the situation is likely to be beyond the control of the responsible civil authorities.

I would only add that the auxiliary squadrons of the R.C.A.F. are carrying out training, and are being equipped with Otter aircraft, which will assist the army in survival operations. At the present time, that is one of roles for many of the auxiliary squadrons of the R.C.A.F.

The CHAIRMAN: Thank you very much, Mr. Minister.

Gentlemen, that completes the four groups, as suggested in our procedure—the United Nations, NATO, NORAD, and national emergency survival.

You will notice, at page 226 of the evidence, the beginning of the minister's statement on NATO.

Mr. SMITH (*Calgary South*): Mr. Chairman, could I ask a question?

The CHAIRMAN: By all means.

Mr. SMITH (*Calgary South*): I notice that the minister has with him many of his maps, charts, and staff, in relation to the national survival program. I was wondering if it would be of any assistance to the staff, and while having this fresh in our minds, if, under the circumstances, we might consider the last report first.

The CHAIRMAN: We could do that. However, the time is now 10.30, and I still feel that this group who are particularly interested in this section of the emergency survival program will have to return anyway. In the few minutes left, I thought if we did go back to the minister's statement on NATO, we could start questioning on that, and then break this meeting off in fifteen minutes.

Mr. CARTER: Mr. Chairman, let us do that. I see here a number of charts and maps, which I think were brought here for some purpose. While this statement is fresh in our minds, perhaps these could be used. If they were brought to illustrate some special point, I think we should have the benefit of them while they are here.

The CHAIRMAN: That is what Mr. Smith said. I felt that these witnesses must come back a second time; is that not true, Mr. Minister?

Mr. PEARKES: As you wish.

The CHAIRMAN: I do not think we will be able to finish this in 15 minutes.

Mr. CHAMBERS: Perhaps, Mr. Chairman, we could take a look at what is here now.

The CHAIRMAN: There is another thing, Mr. Minister: Is there any way of reproducing some of these, so that we can get them in the evidence?

Some hon. MEMBERS: No, no.

The CHAIRMAN: I do not see how it could be done. Is there any point on this, Mr. Minister, while the big maps are here?

Mr. SMITH (*Calgary South*): Let us put the question this way: does the minister, or his staff, wish to say anything on these maps?

Mr. PEARKES: Very briefly, Mr. Chairman, I think I can say this. This big chart here shows the general organization of the survival attack warning system.

We could assume that from headquarters at NORAD—which is the main centre at Colorado Springs—we might get early warning coming in from the arrival of bombers, or of missile attack.

That would be communicated through from there to the northern region at St. Hubert, and simultaneously here to Ottawa. A decision would be taken in Ottawa as to the time that a warning should be issued; that is, that the sirens should be sounded in any part of Canada. That could be communicated rapidly to all the provincial centres, where today—I want to emphasize this—since September of last year, there is a 24-hour manning of the provincial warning centres from British Columbia to Newfoundland.



Then, having received the information from Ottawa that, we will say, a warning was to be sounded in the provinces of Quebec, New Brunswick, Prince Edward Island and Newfoundland, that warning would be sounded by means of sirens. The siren, in effect, tells you: "Listen to your radio and stay indoors for further instructions".

Then the system of controlled broadcasting would go into effect, and certain designated broadcasting stations would issue the further instructions which would emanate from the various provincial warning centres. That is the situation at the present time.

Mr. WINCH: Mr. Chairman, may I ask the minister if the reports from the three radar warning lines go only directly to NORAD, the primary warning centre, or do the reports go anywhere else? Secondly, I would imagine that a centre such as that would be one of the primary objectives of any attack. If that went out, what is the function then?

Mr. PEARKES: If Colorado Springs went out?

Mr. WINCH: First of all, do the warnings from the three radar lines that we have go only to the NORAD centre?

Mr. PEARKES: No; they are simultaneously reported to the NORAD regions.

Mr. WINCH: To all the regions, at the same time?

Mr. PEARKES: To all the regions: they get the information simultaneously.

The CHAIRMAN: We get it in St. Hubert at the same time as Colorado Springs.

Mr. CARTER: I would like to make two suggestions, Mr. Chairman. When the minister was describing these elongated areas on the map, it was stated that these areas were based on the assumption of a five megaton blast.

I see over here a chart which gives information about what a five megaton blast is, and what it would do. I think that should be on the record, for people who might be reading this evidence—for their enlightenment.

The CHAIRMAN: That is a good idea. May we have that now, Mr. Minister?

Mr. CARTER: The other suggestion I would like to make, while it is fresh in my mind, is this: there is quite a long statement made on this in the evidence of the estimates committee, when the national health estimates were before the house. It might be worth while to get the evidence of that particular sitting and have it made available along with the evidence of this sitting.

The CHAIRMAN: Each member here has a copy of that evidence in his room.

Mr. CARTER: I was thinking in terms of people outside, who would—

The CHAIRMAN: Your thought is to include in this evidence, the evidence that was taken before Mr. Smith's estimates committee?

Mr. CARTER: Yes; because people from outside, who would naturally be looking to this committee, might not have in mind, or might not even know, that there was further evidence in the estimates committee on this very same subject.

Mr. WINCH: You have now told them.

The CHAIRMAN: Would you explain that, please, Mr. Minister?

Mr. PEARKES: For the purpose of the record, this chart shows the blast damage of a five megaton weapon, assuming that it has dropped at a particular point. On this particular map, it shows Ottawa.

Mr. WINCH: Is that an air blast, or a ground blast?

Mr. PEARKES: The data represents the average between the surface and low air burst. Assuming that the bomb burst has been here—

The CHAIRMAN: When you say "here", Mr. Minister, you mean Ottawa—just to identify it for the record?

Mr. PEARKES: Yes, Ottawa. For a two-mile radius from the point of the bomb burst there would be complete destruction and all personnel would be killed.

At a five-mile radius, buildings would be demolished, or severely damaged; walls and roofs would collapse; steel-frame buildings would be severely distorted.

At an eight-mile radius, houses would be damaged beyond repair; frames distorted; walls cracked; doors and entrances damaged.

At a ten-mile radius from there, houses and buildings would be uninhabitable under normal conditions. Values have been adapted to Canadian building standards and types of construction.

That would apply, of course, to the radius emanating from bomb bursts anywhere, at any point.

The CHAIRMAN: Thank you, Mr. Minister. I think on that note, gentlemen, we will adjourn this meeting until—

Mr. HELLYER: Mr. Chairman, before you adjourn, I wonder if you could call a steering committee meeting for two purposes: one, to consider the acceleration of the work of this committee by perhaps including an extra meeting per week; and also to discuss the times at which the committee can best meet, now that the house is sitting in the morning. Also, that the old schedule upon which we agreed is no longer operative.

The CHAIRMAN: We shall do that either this afternoon or the first part of next week, depending upon when the group will be here. Then, gentlemen, we will go back to page 226 at our next meeting.

Mr. HELLYER: Mr. Chairman, there is just one point on that. I have mentioned this, I think, three times. I am sure we will be allowed to ask a few general questions before we get down to NORAD and NATO specifically.

The CHAIRMAN: Yes, the purpose of that is merely as an agenda to go through.

Mr. WINCH: Mr. Chairman, may I also say that when I spoke a little earlier this morning, I should have made it quite clear that I was not referring to all the press; but I was just referring to certain sections of the press.

Mr. SMITH (*Calgary South*): Are we still assembled?

The CHAIRMAN: No.

Mr. SMITH (*Calgary South*): Are there any more press statements to be made?

The CHAIRMAN: That is it.

—The committee adjourned.

## MINUTES OF PROCEEDINGS

House of Commons, Room 238-S.

WEDNESDAY, June 15, 1960.

The Special Committee on Defence Expenditures met at 3.30 o'clock p.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Fairfield, Forgie, Halpenny, Lambert, Macdonald (*Kings*), Parizeau, Smith (*Calgary South*), Thompson, Webster, Winch.—13.

*In attendance:* Honourable George R. Pearkes, V. C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (*Finance*); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns; Colonel L. E. Kenyon, Director of Survival Operations and Plans.

Before proceeding with the Orders of the Day, Mr. Smith (*Calgary South*), on behalf of all other Members of the Committee, extended congratulations to the Chairman on his recent birthday, June 14th, 1960.

The Committee resumed from Friday, June 10th, consideration of the 1960-61 Estimates of the Department of National Defence.

Mr. Pearkes was questioned at length on the Emergency Measures Organization (EMO). He was assisted by Colonel Kenyon.

The Committee having completed the questioning on EMO proceeded to question the Minister on the latter's statement respecting NATO.

Certain questions were asked of the Minister to which he undertook to supply answers at a subsequent meeting.

And consideration of the 1960-61 Estimates of the Department of National Defence still continuing, it was adjourned until the next sitting.

At 5.15 o'clock p.m. the Committee adjourned to meet again at 9.30 o'clock a.m. Friday, June 17th.

Antoine Chassé,  
*Clerk of the Committee.*





## EVIDENCE

WEDNESDAY, June 15, 1960.

The CHAIRMAN: Gentlemen, we have a quorum.

Mr. SMITH (*Calgary South*): Mr. Chairman, while the minister is taking his place, may I take this opportunity of wishing you a very happy birthday as of yesterday.

The CHAIRMAN: Thank you very much, Mr. Smith. That is very nice of you.

Gentlemen, you will recall at our last meeting, both Mr. Carter and Mr. Smith suggested we continue with civil defence inasmuch as that was the last statement of the statements which the minister was going to give to us. I think that would be wise, while it is still fresh in your minds.

If you will turn to page 265 of the proceedings, you will find the minister's statement starting on that page.

After we have completed civil defence, we will turn to NATO.

Are there any questions?

Mr. SMITH (*Calgary South*): Mr. Minister, I am not going to refer to anything included in that statement but, rather, something that is not in it, and ask your views.

You are well aware, sir, of an organization in the United States known as the civil air patrol. Canada also has a much smaller organization, whose general responsibility is to mobilize civilian aircraft, under a military principle, for the combined purpose of air search and rescue duties, keeping at first hand a group of amateur pilots available in the event of an emergency and, for the purpose of this discussion, to contribute something in the national survival program.

This body is largely unrecognized in Canada. However, I understand some inquiries have been made, through the chief of air staff, as to the possibility of developing a civil air patrol in support of the mobilization of military forces for the national survival program. Obviously, communications in the event of a disaster or an emergency, are going to be paramount, and it would seem, if telecommunications have been mobilized as they recently have, that the Department of National Defence should give some consideration, in cooperation with the Department of Transport, of course, to following the example of the United States, who have found the C.A.P. to be very effective. As Canada has a greater per capita number of amateur pilots, it would seem to me this is an area that could be extremely useful to EMO, and would not require a great deal of capital, because the facilities—aircraft and training, are already available; but also in the principal role of civil defence, which is the subject we have under discussion now; and also, in addition to the roles of air search and rescue, and the advantage of maintaining a nucleus of pilots in the event of an emergency.

Could you comment on this, Mr. Minister?

Hon. G. R. PEARKES (*Minister of National Defence*): Yes. This matter has been discussed both with the air force and the Department of Transport, and at a recent meeting of the cabinet EMO committee. We have welcomed the offer which has been made by the flying clubs.

We felt the best arrangement for the start would be that each group should work within the provincial organization, and that they would be part of the provincial civil defence organization.

As you know, auxiliary squadrons, of course, are part of the military survival operations, and have a definite role to play.

As there is such a variety of tasks which the flying clubs might do—the movement of people, and that sort of thing—it was considered the best arrangement could be made through the provincial civil defence organizations, and the civil defence organizations have been communicated with.

Mr. SMITH (*Calgary South*): Mr. Minister, there comes to mind a second question then. I am glad to hear that some encouragement has been given this group.

However, Mr. Minister, I was not thinking only of the flying clubs, because I have taken an active part, as an example, in commercial private aircraft, who have formed into this civil aeronautical control in my area. There are great air armadas of commercial aircraft that would be available as well, and who are not necessarily members of the royal flying clubs association.

The point that worries me, in your reply, Mr. Minister, is that in another committee, we found we had a difference in the level of the advancement of one province compared with another in the development of their national survival program. This is quite obvious, and is to be expected.

If this responsibility is an important one, if this is going to be assumed by the provinces, are we not going to find rather the same situation, in that the active province, which has an aggressive civil defence program, will usefully employ those aircraft, whereas an inactive province will not take advantage of it.

I am concerned with uniformity; I am wondering if the direction should not come from yourself, through the air force.

Mr. PEARKES: A start has been made, as I say, quite recently, and we have contacted the provinces in regard to the coordination of the activities. Naturally, we would like to bring all up to the same level. That coordination will be done through the EMO officers in the various provinces.

The CHAIRMAN: Have you a question, Mr. Lambert?

Mr. LAMBERT: Yes, on the same point.

Is the point of leadership being supplied through the EMO regional director, or is it being left with the provincial authority?

Mr. PEARKES: The EMO committee have advised the provinces and the flying clubs that the flying clubs should contact the provinces—and, of course, the EMO regional officer would be there to give any advice and assistance he could, and would still endeavour to give impetus to this particular activity.

Mr. LAMBERT: Is it a fair commentary that the initiative will come from the provincial organization as against the EMO organization?

Mr. PEARKES: I would say the initiative has been taken by the EMO organization already, and it will be followed up by the provincial organizations in each province, in which there is an EMO officer who will be fully conversant with the work.

The CHAIRMAN: Gentlemen, are there any further questions on this one point before we proceed to another subject?

Mr. FAIRFIELD: Mr. Chairman, in connection with civilian personnel, it states at the top of page 271:

In the event of disaster, the activities of civilians trained in rescue operations will be controlled and directed by the army in those areas which have suffered from nuclear attack or been heavily damaged.

Perhaps the minister will recall, during the heavy raids in Great Britain, that they found the ordinary civilian rescue operations were not too well performed until these people became part and parcel practically of the active army, and came under the regulations.

Is it the intention of EMO to have these people called up and be paid, as if they were not civilian personnel but employees of the army and, thereby, directly under army and militia units?

Mr. PEARKES: Not in the first instance anyway.

They will be working just as the ordinary civil defence volunteer worker is organized today. However, when it comes to a question of re-entry into a devastated area, the army would hope to receive volunteers in order to help clear up the situation within the heavily damaged area.

Whether there would be any remuneration, is a matter which has not been settled.

Mr. FAIRFIELD: Does the minister agree that all these people possibly will be engaged in a very hazardous occupation?

Mr. PEARKES: Yes; if there is a nuclear attack on this continent, we are all going to be engaged in a very hazardous occupation.

Mr. FAIRFIELD: But, particularly in the case of re-entry into an area which has been very heavily damaged?

Mr. PEARKES: There will not be any people especially earmarked at this time for re-entry and, as I say, the matter of any financial remuneration has not been discussed.

Mr. FAIRFIELD: I am not thinking only of financial remuneration but, in case of injury or illness from radiation, and so on, as volunteers, they would have no coverage and so on but, if they were as the personnel were in England, they were covered in this case by the war act.

Mr. PEARKES: I would like to get advice on this point, because I am under the impression that any civilian civil defence worker who is injured while carrying out civil defence duties is protected. However, I would like to get some further advice on that. Actually, that would not come under my department in these estimates; but, if I recall correctly, they will be recompensed.

The CHAIRMAN: Possibly, Mr. Minister, you can give us that information at the next meeting.

Mr. PEARKES: Yes, I will do that—or possibly I can send for the information, and it can be obtained by telephone.

The CHAIRMAN: It would be better if you could, Mr. Minister. Gentlemen, are there any further questions?

Mr. FAIRFIELD: Mr. Chairman, I have one other question.

You mentioned also that you were obtaining a very high frequency radio from the United Kingdom. Could the minister give us an idea of its range?

This is mentioned at page 271, and referred to as the C-42 V.H.F.

Mr. PEARKES: Yes. I think we were referring to the C-42 V.H.F. set. Their range is 15 miles.

Mr. FAIRFIELD: Is it going to be made available to militia units?

Mr. PEARKES: Yes.

The CHAIRMAN: Mr. Lambert, have you a question?

Mr. LAMBERT: Reverting back to Mr. Fairfield's first question, is it at all envisaged that local military commanders may be given the power to more or less conscript or enrol under order or under power trained civilian personnel for purposes of survival operations?

Mr. PEARKES: Not in advance of the catastrophe happening.



Mr. LAMBERT: You say not in advance of the catastrophe happening; but in the event of the catastrophe happening?

Mr. PEARKES: In the event of it happening, it is hoped there will be volunteers available.

Mr. LAMBERT: And, if there are not?

Mr. PEARKES: Then the army will have to do the best it can without them.

Mr. LAMBERT: There is no provision for bringing these people in?

Mr. PEARKES: Not into the army. They are civil defence workers, and just exactly the same as the old civil defence organization. They are there, and we hope that large numbers of them will be trained so they will be able to assist the army in the event of their services being required.

Mr. LAMBERT: Are there no provisions, at the present time, for the calling up of these people?

Mr. PEARKES: There is provision for calling them up.

Mr. FAIRFIELD: Perhaps the minister will recall the A.R.P. personnel in England. They had much the same volunteer organization up until 1939. When the bombs first started dropping, most of those volunteer personnel went with their families out of the bombed areas, and left the ground practically uncovered. Now, they had to come to the conclusion that they had to call up these people, actually pay them, and bring them under the war act in Great Britain.

Do you envisage that we have better volunteers maybe in Canada than they do in Great Britain?

The CHAIRMAN: Was the war act changed at that time?

Mr. FAIRFIELD: No. These people actually were called up, and they employed 380,000. I was wondering whether the minister thinks that possibly the voluntary organization will work better in the event of a disaster in Canada than it did in Great Britain during the disaster of 1940.

Mr. PEARKES: There is no provision made for the call-up of civilians at the present time under any legislation that I know of. I do not know whether this provision could be covered by the War Measures Act or not.

In regard to your other question in respect of injured civilians, they are covered by the Workmens Compensation Act. The province would pay 25 per cent of the cost and the federal government would pay 75 per cent of the cost of compensation to any injured individual.

The CHAIRMAN: Does this apply to individuals who are not full-time employees, and that they would be covered under the Workmens Compensation Act?

Mr. PEARKES: If an individual is employed on civil defence operations he would be covered.

Mr. FAIRFIELD: Does this situation exist in every province, Mr. Minister?

Mr. PEARKES: I am informed that this is in force in the majority of provinces and is being negotiated at this time with the other provinces.

Mr. WEBSTER: What is the situation in regard to self-employed people; do they come into this arrangement? Does a self-employed individual who joins the civil defence organization and who is injured come within this arrangement?

The CHAIRMAN: Would an individual who earns over \$5,300, or whatever the limitation is, be covered as well?

Mr. WEBSTER: There is a limitation in regard to income and there is also the limitation in respect to the employed or self-employed individual.

The CHAIRMAN: Could you find out the answers to these questions for us, Mr. Minister?

Mr. PEARKES: Yes. I have not got the actual details here, but this is not an expenditure which is included in our estimates.



Mr. WEBSTER: This is not a cost in your budget, no.

Mr. PEARKES: I could acquire the general detail in that regard.

The CHAIRMAN: That will be satisfactory.

Mr. CHAMBERS: I am wondering if there was any existing provision which would give a local military commander during an emergency the power to give orders to such organizations as municipal fire departments and municipal police departments who could be required to go out of their own areas?

Mr. PEARKES: The intention is that the military authorities would not give orders outside of areas of heavy devastation. If the military organization moved in to an area, and the term is "re-entry", where practically everything is destroyed in that area and the surviving people there would have to be moved out because of heavy contamination, then volunteers coming in, be they an organized body like the fire department, might be placed at the disposal of the military commander and would work under the general direction of that military commander who is responsible for the re-entry operation.

Mr. CHAMBERS: This would still be a voluntary thing. For instance, if you take the example which we had illustrated on our charts, and if Ottawa was bombed, would the military commander have the right to order the Renfrew fire department to come down to fight fires on the perimeter?

Mr. PEARKES: That fire department could only be placed at the disposal of the military commander under the present arrangement, by the Renfrew municipality. If this municipality offered to assist this department, then the department would work under the direction of the military officer in charge. No military officer would have the right to go to Renfrew or Pembroke, or anywhere else and order the fire department to come to Ottawa.

The CHAIRMAN: There exists now that arrangement between the municipalities, is there not, Mr. Minister?

Mr. PEARKES: We are working toward greater cooperation between the different municipalities.

Mr. CARTER: Mr. Chairman, my question arises out of the question with which Mr. Smith opened these proceedings.

At our last meeting the minister gave us a very comprehensive and detailed account of the organization that is envisaged and is in the process of being set up for national survival. It is evident that the overall objective of this organization, and the whole purpose for its being is national survival. I am wondering whether that overall objective could be subdivided into other specific objectives or goals which are being pursued and developed under the national survival policy. If that overall goal or objective could be broken down it would be very helpful to the members of this committee, and particularly helpful to myself. I wonder if the minister could give us an illustration of this breakdown.

The CHAIRMAN: If you will look at page 266 you will see that the minister there said: "the responsibilities which are to be given are as follows:" and they run from A up to H. I think that gives the breakdown and answers your question, Mr. Carter.

Mr. CARTER: That is not quite what I had in mind. Perhaps I am not expressing myself too clearly. The explanation given at pages 266 to 268 illustrates the different parts of the organization.

The CHAIRMAN: This illustration gives us the division of responsibility.

Mr. CARTER: It does illustrate the division of responsibility, but I am thinking in terms of goals which we are pursuing.

The CHAIRMAN: Would that not follow as a result of the division of responsibility, Mr. Carter? I am afraid I do not know what you have in mind.

Mr. CARTER: It would be very helpful to me if I could clarify this division of the overall goal of national survival. In order to attain that overall goal we must attain a number of specific goals and objectives. I am just wondering if the minister could give us in capsule form what the specific objectives might be.

The CHAIRMAN: Can you add anything at this time to your statement, Mr. Minister?

Mr. PEARKES: I do not understand what the question is. In my statement you have the responsibilities which have been designated. There are the various responsibilities listed, for instance, determining the location of a nuclear explosion and the patterns of fall-out, and giving the necessary warning of fall-out to the public. That is an army responsibility, as I explained at the last meeting; and that is being carried out by arrangement under which a number of warning centres and reporting centres in respect of fall-out will operate first of all on a grid which is 15 miles by 45 miles across the inhabited portion of Canada. From these locations the warnings are transmitted to the central warning centre and to the different provinces.

Mr. CARTER: Surely the minister does not envisage that all these projects will move along at the same pace and be completed at the same time. It is only natural when different departments and agencies are involved, pursuing these responsibilities, some will move ahead faster than others, and some certainly will merit priority over others. That is what I have in mind and what I would like to find out.

Mr. PEARKES: Very considerable progress has already been made in respect of the arrangement of these different warning centres through the cooperation of the different services, where there are personnel who have the knowledge and who are trained, and where communications exist. A great number of those reporting stations have already been established now. It is true that they require more equipment and more detecting equipment, and we are acquiring that as quickly as we are able.

There is a degree of priority, I suppose, as to where this equipment is placed first, being those areas which are likely to be targets. We hope that by the end of the year we will have most of this equipment placed there. There will be fairly even distribution of this equipment across the country.

Mr. CARTER: Would it be fair to say that arrangements for the placement of adequate warning systems would be given a first priority in view of the fact that without this system apparently the rest of the project will not function?

Mr. PEARKES: The first priority was given to the arrangement of a warning system to detect and give warning of the approach of hostile bombers or missiles. That system is being connected up. At the same time we have gone ahead with this fall-out warning system, which is of great importance too.

Mr. CARTER: Yes, and those two systems represent the two essential parts of the project?

Mr. PEARKES: I feel that there are three essential parts. First we have the warning of an impending attack, secondly the description of the fall-out and thirdly the re-entry. In regard to those three parts of the project, they are moving along together.

Mr. CARTER: They are all progressing?

Mr. PEARKES: Yes, they are all progressing.

Some types of equipment have been easier to acquire and are not as expensive as some of the heavier equipment the purchase of which must wait; but the scheme is moving rapidly forward.

Mr. WINCH: When you say the whole scheme is moving forward you are referring to the planning for the national survival in the event of a nuclear attack. I would like to ask a question in this regard. As a result of information I have read and heard I am left with the impression that in the event of a nuclear attack, as far as the major centres are concerned, there will not be sufficient warning to allow a complete evacuation, and therefore in regard to those individuals in an area who are not going to be able to get out, shelter will be the only protection available to them. We have been told at a previous meeting that the defence research board has done some work in cooperation with another agency in regard to the type and construction of shelter needed. We have also heard about this problem in another committee. I have felt that this problem should be treated with the utmost and highest priority, and I am speaking of the type of shelter needed, be it small or large. I have heard that a book of instructions or a plan is being printed in this regard. Could the minister give us any information as to when this book of instructions will be available?

The CHAIRMAN: Mr. Winch, I do not know whether this subject falls within the responsibility of the Minister of National Defence. However, there is no reason why he should not comment on it.

Mr. WINCH: The minister has commented on the overall national survival plan.

Mr. PEARKES: I understand that the book to which you refer is being printed by the EMO organization and is expected to be published shortly. I have not got the actual date when it is expected to be published, but I have been informed that it will be ready in the near future.

I am just now informed that this book will be published within a month or so.

Mr. WINCH: I would be pleased if you could put a time limit on the "or so", because that is the answer that we have been receiving for a long time.

The CHAIRMAN: We do have a definite answer in that regard now, Mr. Winch.

Mr. SMITH (*Calgary South*): Mr. Chairman, I have a supplementary question to Mr. Carter's question. The minister has dealt with the question in regard to priorities on the delivery of equipment. The role which has been assigned to the militia is a very important role and one which the minister has acknowledged responsibility for. There has been a great deal of enthusiasm in this regard as shown by the increase in the number of enlistments.

One of the criticisms, Mr. Minister, refers to the old question; when are we going to be able to secure equipment in order to carry out this role? Many of the regiments, for example, are still performing the additional role of supporting our present call-ups. I wonder if the minister could report any progress in regard to the provision of national survival equipment to militia units in Canada?

Mr. PEARKES: Yes, I believe in general terms the militia has been issued with sufficient rescue equipment, such as, partial quantities of rescue kits and of radiac instruments to start training in the role of national survival; and sufficient additional items, the main items being such requirements as radiac equipment, radiac meters, computer indicators, technical dosimeters, radiac trainers, and other major items of survival equipment including additional quantities of rescue kits to equip both regular and militia to full scale; additional requirements of radiac equipment including radiac meters, gamma



survey, tactical and technical dosimeters, dosimeter charges, and radiac trainers, and special equipment such as vehicle kits, water tank, repair and welding. Those are some of the items which will be provided, in order that they can perform their full survival role.

The CHAIRMAN: Are they on order now?

Mr. PEARKES: Those which I have read out.

Mr. SMITH (*Calgary South*): In order that a layman like myself may understand the extent of the presently equipped units in Canada, is there any estimate that you can give by rule of thumb which would say that the militia units are currently two-thirds equipped, or half equipped, or less than one-quarter equipped? How far do they have to go? That is what I am trying to get at.

Mr. PEARKES: All militia units have got sufficient equipment now to train with. They have not got sufficient equipment to carry out operations; but, by the end of the year, I would say that major items will be received.

There is another list here which I think will interest you. The major items of survival equipment for which procurement action will be initiated in 1960-61 include floodlights, portable generators auxiliary and cable, pumps centrifugal, air breathing apparatus, radiac equipment including radiacmeter, gamma survey, aerial; radiacmeter, gamma survey, vehicle; radiacmeter, gamma survey, remote, field, and so on.

Mr. SMITH (*Calgary South*): Can you give an estimate to the committee of what the total cost yet required will be in future estimates for complete equipment for militia units?

Mr. PEARKES: I could not possibly estimate what the total cost of equipment would be. I do not think we have the figures, but I can give you some figure regarding survival equipment, and the amount included in this year's estimates. It is \$3,764,000.

That does not include signal equipment, regular signal equipment, for which there is another \$2,561,000. And as far as signal for warning, such as sirens, and that sort of thing is concerned, there is another \$1½ million; so that makes a total of \$7,850,400 for equipment included in these estimates, which will go a long way to give the essential equipment to the regular and militia units. But I am quite certain that the other equipment, particularly the heavier type of equipment—

Mr. SMITH (*Calgary South*): This estimate would represent one-half or less of the total expenditure still required?

Mr. PEARKES: The expenditures will have to go on for several years.

Mr. FAIRFIELD: Is it intended to equip those in the regular survival column areas the same as was demonstrated to us earlier this year?

Mr. PEARKES: Yes; a demonstration was given on an army scale which showed the type of equipment which is being obtained, and as soon as it is obtained it will be issued to regular and militia units.

Mr. THOMPSON: Mr. Chairman, I think that the minister's statement discloses a very comprehensive plan as far as national survival is concerned; but I would like to know what is being done to make the public aware of this plan.

Mr. Winch mentioned the matter of basement shelters, and also the matter of alerts and signals, radio broadcasts and siren signals. But what does the general public know now about siren signals, should an emergency arise?



Mr. PEARKES: There is a great deal of instruction given out to the general public not only through the army personnel but also through the civil defence personnel who received training; and very, very frequently quite long articles appear in the daily press and in the weekly press.

I remember that just about a week ago there was a long article in one of the weeklies written by General Worthington, describing in considerable detail the organization of the plan. I might say that he received some of that information from our department.

The CHAIRMAN: Will not your proposed brochure bring out a lot of that information? I mean the brochure which is to be published within a month?

Mr. PEARKES: I think the one to be published is mainly a description of shelters.

Mr. THOMPSON: It is just a question of how far this information is reaching the public. I think it is very important that the public should know what to do in the case of an alert; they should know, when a siren goes, that they should go to their radios and listen to their radios, but I wonder how many people know what to do. I venture to say that very few people realize what to do, and I think it is very important.

The CHAIRMAN: What is your question?

Mr. LAMBERT: Is consideration being given, or is preparation being undertaken for a sort of publication entitled, shall we say, "What every householder should know about civil defence and what to do", for general distribution?

Mr. CHAMBERS: On a point of order, surely this is not national defence; this is off these estimates.

The CHAIRMAN: What was your question again, please?

Mr. LAMBERT: Is consideration being given to, or is there under active preparation a publication—I might call it "What every householder should know about civil defence and what to do"?

Mr. PEARKES: I can say that there are a great many pamphlets describing the work which are issued through the information branch of the emergency measures organization.

Mr. SMITH (*Calgary South*): Are there too many though?

Mr. PEARKES: I would not think there are too many.

Mr. LAMBERT: What is being done about their distribution? I presume it is made by voluntary request of the individual?

Mr. PEARKES: They are sent out to the various provinces and to the EMO offices, and the civil defence offices have them.

You asked what steps are being taken. Quite recently General Wrinch, Director general of survival operations, made a tour all across Canada, and he has been holding meetings and describing the work, but without getting the people hysterical. I think we have to be careful not to get people hysterical. But there is a great deal of information being sent out by one channel or another.

Mr. SMITH (*Calgary South*): Do you not think though that there is a risk in providing too much information, too complicated, and too detailed?

Mr. PEARKES: We try to avoid that risk.

The CHAIRMAN: On page 266 you said that included among the responsibilities which you had been given was the provision of technical facilities and operation of a system to give warning to the public of the likelihood and imminence of an attack; and on page 268 in the third paragraph you said it was necessary to develop an emergency organization for planning and operation to control and administer the national communications system, including radio and television broadcasting.

My question is this: is there anything in this year's estimates—any amount of money in this year's estimates, to advise people as to which radio or television station to listen to in the case of an emergency?

Mr. PEARKES: That would come under the Department of Transport.

The CHAIRMAN: Very well. If it comes under the Department of Transport, then my question is out of order, and I rule myself to be out of order.

Mr. BALDWIN: My question has reference to a statement made on page 267. If by any chance a region should become cut off or isolated from federal authority, is it your plan to concentrate the work of the various provincial officials concerned who operate within that region? Is it intended that they shall act as an intermediary or federal government operating with full authority in respect to that area and assigned to it?

Mr. PEARKES: In each of these centres which are being established and being given protection against fallout, there will be a signal element, and there will be federal officials such as EMO officers and other federal departments in that area, and while there are federal officials of different departments in each province now, there would also be provincial officials.

Mr. BALDWIN: I have in mind the possibility that if by any chance a region should be cut off or isolated, would this leave the federal authority in that particular region in all respects completely vested with the authority of the central federal government?

Mr. PEARKES: They would be carrying on the activities of the federal government within that area which is cut off from communication; they would have full responsibility for that.

Mr. BALDWIN: That would include control over the military as well as the civilian part?

Mr. PEARKES: Yes, for coordination.

Mr. BALDWIN: Does that authority go into force when the Emergency Measures Act has been proclaimed?

Mr. PEARKES: It would go into force when the area became isolated.

Mr. MACDONALD (*Kings*): Mr. Chairman, I have a brief question of privilege first. On page 262—

The CHAIRMAN: Which paragraph?

Mr. MACDONALD (*Kings*): In the second paragraph of Mr. Hellyer's remarks he said:

The committee on veterans affairs is meeting. Mr. Carter has just been there and has now come to this committee because there is not a quorum there and that committee is unable to do its business.

The CHAIRMAN: Where is that?

Mr. MACDONALD (*Kings*): I am reading from page 262, the second paragraph of Mr. Hellyer's remarks, and the fourth line down.

I have been a member of that committee for the last three years, and we have never had any difficulty whatsoever in obtaining a quorum.

The CHAIRMAN: Thank you.

Mr. MACDONALD (*Kings*): I just wanted to bring it to the attention of this committee and to say that it is entirely incorrect. And I have checked with the chairman of the veterans affairs committee.

The CHAIRMAN: All right, your observation is on the record now.

Mr. MACDONALD (*Kings*): I would like to make a brief comment on the national survival program. I have had some connection with it over the past

five years, and through militia work, and I must say that it is very encouraging to see that during the last year a staff has been set up and a program finally established on a firm basis, and that it is going places. I think it is working out very satisfactorily.

I would like to suggest that any member, if he has the opportunity, should take an orientation course at their fine school at Arnprior. I took that course last year. I think I was the first member of parliament to take it. I think they have an excellent staff and very good quarters.

The CHAIRMAN: Thank you very much.

Did you have a question?

Mr. MACDONALD (*Kings*): Yes. This program is a natural one for the army, since the army is a ground force. But I wonder if the minister could explain just briefly what the role of the R.C.A.F. and the R.C.N. would be? Would they be responsible for other than their own protection in a national survival program, or would they provide any assistance to the militia as a body?

Mr. PEARKES: Yes. As I stated, any available men in the R.C.N. or the R.C.A.F. will be on call to cooperate with the army in any of these operations. It would be particularly useful in connection with the maintenance of communications. They would be available immediately there. Auxiliary squadrons and other parts of the regular R.C.A.F. also would find many roles that they could fit into. For instance, one only has to think of the search and rescue organization. That organization would have aircraft readily available. The air transport command could move heavy equipment and could move numbers of men quickly from one area to another if required.

Mr. MACDONALD (*Kings*): Then their training is such that they could be integrated into the militia.

Mr. PEARKES: The R.C.A.F. personnel and the Royal Canadian Navy personnel receive survival training.

The CHAIRMAN: Thank you, Mr. Minister. Mr. Thompson, I believe you have another question.

Mr. THOMPSON: I have a question in reference to page 3 of the minister's statement. This concerns the emergency measures organization having the responsibility for certain specific operations of the civil defence program including the administration of financial assistance to provinces and municipalities.

The CHAIRMAN: What is the page number?

Mr. THOMPSON: Page 266. I am wondering what form this financial assistance takes. In what way do we give financial assistance to provinces and municipalities?

Mr. PEARKES: We have \$4 million in our department which is available for projects recommended by the provinces and finally approved by EMO. The provinces pay 25 per cent and the federal government pays 75 per cent, except in those instances where the equipment which is applied for by the provinces is going to be used in the meantime for ordinary civilian purposes such as fire engines or an ambulance. Then it may be granted on a 50-50 basis instead of a 25-75 basis.

The CHAIRMAN: Are there any further questions?

Mr. CARTER: I have two or three questions. In my first question I would like to come back to this warning system and the transmission of information about fall-out. As I understand it these systems depend on the supply of electrical power being available at the advance stations. There will be 2,000



of these stations, eventually, spread across Canada. What provision is being made in the event that there should be a power failure at any of these stations?

Mr. PEARKES: In these signal centers there will be standby power equipment.

Mr. CARTER: In every station there will be supplementary power.

Mr. PEARKES: In all the provincial centers.

Mr. CARTER: I take it that the information on fall-out will come from areas very close to the blast—the bomb area. Do you have similar arrangements there?

Mr. PEARKES: Oh, no. When you come to think that there is a report center on a grid every fifteen miles by forty-five times, it would be quite impracticable to have special power facilities in each of those. Of course, some will be fairly near the bomb center; others perhaps will be 200 or 250 miles away from the bomb burst.

Mr. CARTER: Has the minister given consideration to the possibility of sabotage of electric power coinciding with an attack?

Mr. PEARKES: Of course we know of the possibility and of the existence of something in the nature of a fifth column. The detection of that and the elimination of sabotage is a Mounted Police responsibility.

Mr. CARTER: I have one or two questions following Mr. Smith's question about cost. On page 268 the minister said the amount in this year's estimates is \$650,000 and in 1960-62 the forecast is \$970,000. Could the minister tell the committee just what is the basis for these figures. Is this the estimated cost of what will be needed this year to do the job, or is it based on what we think we can achieve this year, or is it based on what can be available for this purpose having regard to the military requirements.

Mr. PEARKES: During the last few months, since the department took over these responsibilities in September, a complete survey of requirements has been made. That is the estimated figure required for providing all the sirens and warning system which may be necessary. This will involve either acquiring new sirens or renting existing sirens.

Mr. CARTER: That is all we will need. That is based on the need.

Mr. PEARKES: That is based on present day needs as a result of this survey which has been made.

The CHAIRMAN: That \$650,000 is a part of the \$7,500,000 which you mentioned.

Mr. PEARKES: Yes.

Mr. CARTER: Would the chairman elaborate on that?

The CHAIRMAN: You mentioned the amount of \$650,000 in the second paragraph on page 268. In today's evidence the minister gave us the total budget.

Mr. PEARKES: We have now included the total for the rental and purchase of sirens; that is for our warning system. The amount of \$1,525,000 absorbs this \$650,000.

Mr. CARTER: Is that figure of \$1 million and some odd thousand the overall cost?

The CHAIRMAN: In the estimates we are looking at the amount of \$7,500,000.

Mr. CARTER: For the army, the navy, the air force and the overall survival program.

The CHAIRMAN: National survival.

Mr. PEARKES: The total for survival equipment, signal equipment and the rental and purchase of sirens in the 1960-61 estimates is \$7,850,400.



The CHAIRMAN: And that is based on what we need on the basis of present day needs.

Mr. PEARKES: That is based on what we need taking into consideration what actually can be acquired this year.

The CHAIRMAN: You will have an opportunity of looking at the details of this later.

Mr. CARTER: There is one other question I would like to ask at this time. In addition to the amount of \$7 million plus, are there any other expenditures in other departments related to this program? Can the minister give the committee any idea roughly as to what would be the total overall cost of this program?

The CHAIRMAN: I do not know how the minister can do that. I had to rule myself out of order, so I certainly will rule you out of order on that. Are there any further questions, Mr. Carter?

Mr. CARTER: I do not want to monopolize all the time.

The CHAIRMAN: Go ahead. We want to finish the whole emergency affair if we can. Please go ahead.

Mr. CARTER: All emergency measures, national survival, civil defence and related organizations seem to be rather complicated, particularly at the higher levels. From the description given in the minister's statement it appears that the Prime Minister, through the emergency measures organization, has the responsibility for coordinating this complicated and intricate organization, which specific organization includes the administration of financial assistance to the provinces. My question is: what are the specific operations?

The CHAIRMAN: Where is that in the statement?

Mr. CARTER: Page 266.

Mr. PEARKES: The Prime Minister's particular duties are those of co-ordinating all the different activities that are going on in connection with these survival operations. There are matters which are referred to him and he is taking a special interest in those matters. He coordinates the activities between the different departments of government.

The CHAIRMAN: As you mentioned further in your statement.

Mr. PEARKES: Yes. When I say "between the different departments of government", that also includes between the different provinces. We have to bring in the provinces in connection with the establishment of these signal centers which have been referred to today. There is an expenditure of money there. In this year's estimates, there is some \$5 million included in the departmental estimates. That really is to get a start on the construction or development of the buildings to which he made reference when he spoke in the house not very long ago.

Mr. CARTER: Assuming that the cabinet committee on emergency planning is primarily a planning body, is there any other means of directing and co-ordinating this complicated organization?

Mr. PEARKES: There is the whole of the E.M.O. staff which is working in the Privy Council office. The director of E.M.O. is Mr. Curry. He has a staff which is examining the various projects which are put forward. He has a secretarial staff which keeps all the correspondence, the minutes of cabinet committee meetings, and the day to day routine work.

Mr. CARTER: At the apex of this organization—this coordinating body—stands the Prime Minister. Could the Prime Minister actually take effective command of the whole organization in an emergency?

Mr. PEARKES: I do not know what you mean by effective command. He certainly would coordinate all the activities there were. He is the head of this whole organization exactly the same as he is the head of the government.

Mr. CARTER: I understood this was for the development stage. When the organization is fully developed, in the case of an emergency who takes active command; who coordinates all this?

Mr. PEARKES: The Prime Minister.

Mr. CARTER: Still the Prime Minister?

Mr. PEARKES: The Prime Minister is the head of this organization.

Mr. CARTER: And he would—

Mr. PEARKES: He would coordinate the activities of the different departments as their responsibilities are defined in the civil defence order in council.

Mr. WINCH: I have an idea that he might have a few other things on his mind at that time.

Mr. PEARKES: He can always delegate responsibility to somebody else; and he has, to help him, the cabinet committee.

Mr. CARTER: The Prime Minister's main responsibility is to ensure continuity of government, and in face of that responsibility, would it be possible for him to command this organization; and if not, who would be the person who would do so?

Mr. PEARKES: I think "command" is quite the wrong term. Command is a military term, in which an officer is given command over a certain unit. I do not think that a civilian office exercises command.

For instance, I do not command any troops. I am the minister. But there are officers who are—in the army, general officers—commanding, and they have the actual command of troops.

Mr. CARTER: But there is a chain of command?

The CHAIRMAN: Mr. Carter, the Governor General is commander in chief of the army, navy and air force; but I doubt very much if, in time of war, he would pull out his sword and go to work.

Mr. CARTER: I am interested in finding out how these various authorities are coordinated. Is there a similar structure anywhere else in the world that would be comprising five separate departments and a coordinating body off on the side somewhere?

Mr. PEARKES: Most certainly. No one department could possibly carry out all the duties connected with survival operation. You have in the United Kingdom, I know, and in the United States, a number of departments playing their part—doing the work in definite, defined areas of responsibility.

They have all got to be coordinated somewhere; and at apex there is the coordination done by the Prime Minister. But that is only when at a lower level coordination has not been achieved. Below the Prime Minister you have directly the permanent official, the director of the emergency measures organization. He does a great deal of coordinating. There is the cabinet committee, which, as I mentioned at an earlier meeting, comprises a number of cabinet ministers, who sit at that meeting with their officials and ensure that coordination is carried out.

Mr. CARTER: My problem is—

The CHAIRMAN: I should like to know what your problem is, Mr. Carter.

Mr. CARTER: My problem is that I do not see any link between the coordinating body and the different bodies. My problem is how the chain of command, or how the coordination is effected. There must be some means of getting it.

Take a concrete example. Suppose, for example, there was a bomb which burst on Winnipeg. That is a good, safe distance from me.

The CHAIRMAN: We are all happy about that, Mr. Carter.

Mr. CARTER: The military would be involved, and the Department of National Defence would be looking after their responsibility as far as the militia, and so on, was concerned. The minister has just mentioned those. The Department of Health would be involved in providing medical services, treatment, decontamination, and so on. The R.C.M.P. would be involved in looking after law and order; and Transport would be involved in supplying communications.

I would think that in an area that is very close, or subject to a bomb burst, there would be a lot of confusion, and it would be very difficult for these different bodies that are on the spot to effect coordination among themselves. Therefore, there should be some over-all body, or person, to do the coordinating. That is what I am trying to get at. Is there such a person?

Mr. WEBSTER: The G. O. C.

Mr. PEARKES: That is why you have the emergency measures organization officers in each province. They are there to ensure the coordination within the province, not only between the various federal departments but also between the federal departments and the provincial authority.

Mr. CARTER: And if the provincial emergency organization were cut off from Ottawa, the central one, they would then take charge; is that it?

Mr. PEARKES: Yes.

The CHAIRMAN: It is just as simple as that, Mr. Carter.

Mr. CARTER: No, it is not quite that simple, because there would be one person there in that province. That is the question somebody else asked earlier today.

Mr. BALDWIN: I asked that about half an hour ago.

Mr. CARTER: Yes. Is that the man who is going to be top dog in the organization in an emergency—the coordinator?

Mr. PEARKES: If an area were cut off and communications were not available, there would be the organization there; and you have the E.M.O. officer in that area who would be able to effect the coordination between the army, the other federal departments and the provincial authority.

The CHAIRMAN: Do I understand that if he is killed, there is another one?

Mr. PEARKES: That is right.

The CHAIRMAN: And if he is killed, there is a third?

Mr. WEBSTER: Rapid promotion.

Mr. CARTER: This man takes charge—but how much authority has he? He cannot command the military to go somewhere and do something, can he?

Mr. PEARKES: No; but he can call a meeting of the people that are right there, and that can be arranged.

Mr. WINCH: I sincerely hope that is wrong, because you are not going to have any chance of calling a meeting. I sincerely hope the organization is such now that at this time, when we have not got the situation there is planning and coordination so that each one knows what his job is, and immediately, so that they can go into action whether somebody says, "move" or "do not move".

If you are going to call a meeting, let us say our prayers now, and call it quits.



Mr. PEARKES: What I mean by calling a meeting would be this—those people who are in the provincial centre; and if there is any coordination to be done, all he has to do, having the people together, is to arrange for the coordination.

Everybody knows now the particular sphere in which they have to work.

Mr. WINCH: Is it not just the same as in warfare: if a company gets cut off, the commander does not just sit down and say "By golly; I have been cut off: what am I to do?". He goes ahead and does his job. And surely that is the situation in this survival procedure?

Mr. LAMBERT: Is there a take-charge man in this provincial set-up?

Mr. PEARKES: Yes, there is a provincial man: there is an E.M.O. officer appointed in each province now.

Mr. LAMBERT: And does he take charge?

The CHAIRMAN: I think we can clear this up and conclude it by asking the minister: is there a boss in each province?

Mr. PEARKES: Yes.

Mr. BALDWIN: That is the federal authority mentioned on page 267, about which I already asked a question.

The CHAIRMAN: That is right, Dr. Fairfield.

Mr. FAIRFIELD: Mr. Minister, we saw some charts here the other day and they were all based on a five megaton bomb. I understand from the committee's investigation in the United States that they are now capable of delivering 10 megaton bombs. Have any plans been made on that basis?

Mr. PEARKES: I am informed that the 10 megaton bomb is not twice as effective as the five megaton bomb. May I ask the official here to explain that matter.

Colonel L. E. KENYON (*Director of Survival Operations and Plans, Department of National Defence*): We have taken into account the effects of a 10 megaton bomb: but they are not just twice as big as a five megaton bomb. The type of effects with which we are dealing normally increase by the cube root of the yield—so a 10 megaton bomb is only partially, a decimal point, greater than a five megaton bomb.

Mr. FAIRFIELD: I see.

The CHAIRMAN: Are there any further questions along that same line? Mr. Carter, I did not want to cut you off: did you have any further questioning on national survival?

Mr. WEBSTER: May I ask a question of Mr. Kenyon. If the 10 megaton bomb only causes a slight difference in destruction, what is the purpose of manufacturing it?

Col. KENYON: Well, it is there.

Mr. WEBSTER: We know it is there. But if the destruction of the five megaton bomb is equal to two, and your 10 megaton is equal to 2.2, what would be the purpose of manufacturing a 10 megaton bomb?

The CHAIRMAN: Possibly you can get it manufactured for the same amount of money.

Mr. WEBSTER: That could be.

Col. KENYON: You mean, instead of having two five's?

Mr. WEBSTER: Yes.

Col. KENYON: Because your carrier is affected—you cannot have two carriers—if you have individual ones. You are putting all your eggs in one basket.

The CHAIRMAN: May we carry the emergency survival item?



SOME HON. MEMBERS: Agreed.

The CHAIRMAN: Now gentlemen may we turn to the NATO item? You will find the minister's statement in regard to NATO on page 227.

Mr. LAMBERT: My question deals with the supply system to our air division and the armoured brigade group. The air division is supplied through United States channels and the brigade groups is supplied through British channels. Is there an estimate of the savings, if any, in regard to personnel and money which results from the present system as opposed to an all Canadian supply program?

Mr. PEARKES: The question of establishing an all Canadian system was gone into very carefully when the forces were first established and sent to Europe, and from time to time it has been looked into again. All the reports that I have received indicate that it would be very much more expensive and quite impractical to set up an all Canadian supply system.

Mr. LAMBERT: Supplementary to that question; as a result of these different supply channels is there any difference in the scale of services which may be supplied to the brigade group and the air division, and if there is such a difference in the basic scale are any supplementary provisions made to equate them so that individuals in the air division will not feel that they are being looked after in an inferior manner to those individuals in the armoured group, or vice versa? This may be a hypothetical question.

Mr. PEARKES: From reports that I have seen, and as a result of personal visits both to the air division and the brigade I would say that the troops are very well satisfied with the systems they are working under. Of course, there are some slight differences in the type of ration, but the troops are quickly becoming accustomed either to the American type of ration or to the British type of ration. In some cases, in respect of some commodities, special purchases are made of items which may be short in either the American or British ration. These are commodities that the average Canadian young man is accustomed to having. For instance, special purchases are made in order to provide additional quantities of fresh milk. Canadian service personnel are accustomed to drinking more milk than the British soldier is, for example. As far as the American ration is concerned, the Canadians drink more tea than the Americans do and less coffee, therefore, provision is made to equalize that situation.

Mr. LAMBERT: As a result of these special purchases the systems are equal in the long run.

Mr. PEARKES: I would say that both formations are completely satisfied with the type of rations that they receive.

Mr. WINCH: Mr. Chairman, in the event that the information, I require is not available at this time I would ask that it be provided at the next meeting. I am referring to a list of weapons with which our troops overseas are equipped, as well as a list of weapons that they may be expected to use for which the supply of ammunition is not under the control of our own forces. I would like a list of the actual weapons used. I do not want a list of just transport, but a list of the type of vehicles including tanks and carriers of various types. I would ask that the information be made available at the next meeting if it is not available at this time.

Mr. PEARKES: I have some of that information for you now. Perhaps it would be better for me to table a complete list at the next meeting.

Mr. WINCH: I would appreciate that.

Mr. PEARKES: Naturally it will be quite a long list but I will be able to provide it at the next meeting. This would save me reading it out.

I would say that as far as the army is concerned we have practically all new equipment since World War II. There is very little World War II equipment actually being used by the army today.

Mr. WINCH: Of course World War II has been over for quite some time. I am interested in knowing the type of equipment and the type of vehicle being used. For example in regard to tanks, I would like to know whether they are heavy, medium and so on.

Mr. PEARKES: The type of tank being used is the Centurion.

Mr. WINCH: Is that the only type of tank that we have now?

Mr. PEARKES: That is the only tank we have now. Of course, we have scout cars, but the only type of tank we have is the Centurion tank. As I explained, when we were discussing NATO, we are improving that tank by increasing the armoury and by upgunning the deck.

Mr. WINCH: I am particularly interested in any type of equipment and weapon which we have now and will have in the future that requires any type of ammunition which comes under the control of some other force than our own.

Mr. PEARKES: I think I am correct in saying that there is no weapon used by the Canadian forces for which we do not have control of the ammunition. If you are thinking in terms of nuclear weapons then, of course, there are none at the present time included in the equipment of our own forces. When the Honest John is supplied, which will be a year from now, then our forces will have a nuclear capability.

Mr. WINCH: In view of the fact that our forces represent only one centre of NATO, could we have similar information in respect of what other countries' troops have in the way of similar weapons? I am thinking in terms of interchangeability in the event of a defensive or offensive necessity.

Mr. PEARKES: I would not be in a position to give a detailed statement in regard to the equipment used by armed forces of other countries.

Mr. WINCH: I am interested in this question of interchangeability because of the fact that during the last war a great deal of confusion resulted from the lack of this interchangeability of weapons.

Mr. PEARKES: Interchangeability is a very important point and is receiving very important consideration now.

Mr. WINCH: Are meetings being held with the partners in NATO in regard to this question of standardization?

The CHAIRMAN: I think the minister has already stated that a Canadian chaired the subcommittee on standardization of equipment.

I do feel that a list such as you have suggested would be very helpful.

Mr. MACDONALD (*Kings*): Could the minister inform us if the infantry brigade can at this time be lifted by its own and attached vehicles and taken in its entirety from one place to another?

Mr. PEARKES: Last year we sent over a number of additional vehicles and I think I can say now that the whole brigade can be lifted in the vehicles it now has either on establishment or with the inclusion of the additional vehicles which were sent over. This brigade is now a motorized brigade.

The CHAIRMAN: Are there any further questions in regard to NATO?

Mr. CHAMBERS: As a result of a question asked by Mr. Winch, we were informed that the American forces were adopting the same type of gun that we have adopted on the Centurion tanks. This would show that progress is being made in regard to standardization.

The CHAIRMAN: Thank you Mr. Chambers.

Are there any further questions in regard to NATO, gentlemen?

Mr. CARTER: In round figures what are the annual costs of NATO?

The CHAIRMAN: That has already been given to us on page 230 and in the brochure which was tabled.

Mr. PEARKES: Yes, and it is to be found on page 10 of this information pamphlet which was issued to you.

The CHAIRMAN: I refer you to page 212 of our proceedings.

Mr. CARTER: Are our expenditures for NATO the costs which are agreed upon, that is, the commitments which have been assigned to Canada? Is that right?

Mr. PEARKES: That is the total commitment. You will see the actual amounts as given.

Mr. WINCH: I would appreciate hearing from the minister in this matter: could he outline for us the chain of command in the NATO setup, and also tell us whether Canada is consulted in that chain of command, and also whether—this may sound like a peculiar question, but I am very serious about it—security clearance is obtained in the event that one it put in command, especially where he may be in command of Canadian troops, when his country was previously at war with Canada, and when he not only could be but actually was named as a war criminal?

I would like to know just what the basis of the chain of command is when you take in the countries of NATO now, where the command can be outside our own forces, and I would like to know just exactly what the position is.

The CHAIRMAN: I refer you to page 227.

Mr. WINCH: No. I mean the appointment of commanders for the various segments.

Mr. PEARKES: The appointment of the supreme allied commander is agreed upon by all the nations of NATO, and the supreme commander, as you know, is General Norstad.

Mr. WINCH: I am thinking of the sector commanders, and to put it quite clearly: just how is an appointment made, and what consideration is given to the appointment of a German military commander within the NATO setup?

Mr. PEARKES: The commander in chief—that is, General Norstad—would make a recommendation for the subordinate commanders, and that recommendation would be referred to the military council in permanent session. That is, it would be referred to the representatives of the different countries which are in Paris and in Washington.

The CHAIRMAN: That is the general question of the recommendation?

Mr. PEARKES: That is right.

Mr. WINCH: All countries are represented on that council?

Mr. PEARKES: Oh yes, Canada is represented on the council.

Mr. WINCH: Does Canada have the right of objection, if she so desires?

Mr. PEARKES: Oh, most certainly.

Mr. WINCH: Might I ask if the appointment has to be a unanimous decision?

Mr. PEARKES: It would go through the military committee of NATO. And then it is referred to the various governments, and the governments could then, if they felt so inclined, make an alternative recommendation, or raise objection.

Mr. THOMPSON: Has there been any decrease or increase in the number of our armed forces as a result of our joining NATO, or since we joined NATO?

Mr. PEARKES: No; because when we joined NATO, and at the time of the Korean war, our armed forces were stronger in numbers than they are today.



Now, when the Korean war ceased, the number of our forces was reduced; or, to put it the other way: if we had no forces in Europe, we would not need as great a force, and we would not need so many men in the air force or the army.

Mr. THOMPSON: In other words, our forces have not increased as a result of our making contributions?

Mr. PEARKES: I cannot say that they have increased without saying that they are larger today than they were; but if we had not accepted commitments in NATO, we would not require so many men in the army, or so many men in the air force. Of so many men in the navy because we have accepted a commitment in connection with SACLANT.

Mr. THOMPSON: As a result of our commitment to NATO, our armed forces are larger than they would have been otherwise?

Mr. PEARKES: Definitely.

Mr. LAMBERT: On page 230 of the evidence in the middle of the page there is a reference made to national infrastructure. Within the framework of NATO is there any such thing as a Canadian infrastructure, and if so, what is its nature?

Mr. PEARKES: There is no NATO infrastructure in Canada at all.

Mr. CARTER: What I want to find out is the position that NATO occupies in our overall defence policy. With regard to NATO, first, is it right to say that our relationship to NATO is first of all a deterrent, and secondly a shield?

Mr. PEARKES: NATO forces are both part of the shield and part of the deterrent to war. I do not think we can separate them, one from the other, because the shield is a deterrent to war.

If there were no troops in Europe, it might be that there would be a greater danger of an attack being made in Europe. But the fact is that there are troops there who are in position, and than an enemy, if he started to attack, would be checked. The enemy would then have to assess the risk of entering into a major war, or in not proceeding with his immediate plans. I think that is a very definite deterrent to war.

One of the possible causes which might start a war would be the outspreading of some local operation which had been initiated perhaps in the hope of gaining a small portion of territory, and the enemy, not believing that an attack on one nation of NATO would mean that all the nations of NATO would join to resist it. But finding that there are forces of different countries there on the ground, he will realize that there are troops there, and that if a further advance was made it would obviously bring on all the powers of retaliation. So the forces in Europe are not only there to protect European territory, but they also are there as a very strong deterrent to an aggressor.

Mr. WINCH: Would you say that the main function of NATO forces in Europe is to act as a hold-back until such time—or at least I hope it could be done—until such time as diplomacy could get into operation in order to prevent a full scale war? Is that basically its purpose?

The CHAIRMAN: Besides its deterrent aspect?

Mr. WINCH: If it is not a deterrent on a larger scale, you are right into a thermal nuclear war, and you have to be all set for a thermal nuclear war; but I mean that the initial purpose is that in the event of any aggression of a functional nature, its purpose is to hold back the enemy for a sufficient, or limited time until diplomacy can go to work, and try to prevent what could develop into a world thermo-nuclear war?

Mr. PEARKES: Yes, but I am not going to try to give the impression the forces of NATO are strong enough to hold out indefinitely.

Mr. WINCH: No, I realize that.



Mr. PEARKES: Diplomacy would have to work quickly, but they are there and strong enough to take the initial onslaught of an enemy. They are there and they are strong enough to make an enemy pause and assemble larger forces, if he is determined to proceed with an invasion. Any pause there can give time for diplomacy to make an effort to stop the war.

Mr. WINCH: That raises a very moot point, and I do not think you would call it a hypothetical question. It comes in, as it must come into the thinking of the minister and of the government. If anyone was prepared in their thinking and in their action to make a move against the NATO forces, against any country in partnership with the NATO forces, would that not, of necessity, almost be a 100 per cent decision they were prepared to go into an all-out war? Because, surely, the important movement in that aggression, they must know, can only have one result. If it could be handled any other way, then, why move? It must be on the understanding the other side is going to retaliate and is going to oppose. So it has to be with the knowledge, as I say, almost 100 per cent, that it is not just going to be a conventional war, to take over a bit of ground. I may have put it in a peculiar fashion, but that is what I mean.

The CHAIRMAN: I think it is hypothetical.

Mr. WINCH: I do not think it is a hypothetical question.

Mr. PEARKES: I think it depends very largely where this original movement takes place. What is the original intention of a hostile country? They may not believe that if they just take off a few miles of Turkish land—and I am taking Turkey as an example because Turkey is a NATO country—

Mr. WINCH: That is the kind of explanation I was hoping I would get from you.

Mr. PEARKES: They may feel, "Here is a case where we can grab off a bit of land and the allies will not do anything about it, they will not want to start a nuclear war, and they will probably accept it."

I think the fact there are forces there strong enough to prevent that sort of thing happening is going to make the enemy pause and think, and realize, "If we do try to grab off this small bit of land, NATO is sincere, determined and earnest in its statements that an attack on any one part will be an attack on all."

Mr. WINCH: Do you actually feel that in the case of any movement, any aggression of a conventional nature against NATO forces, there could be a possibility it would not necessarily lead to the use of thermo-nuclear weapons?

Mr. PEARKES: I think it is possible that a small operation, carried out with non-nuclear weapons could be checked by another force with non-nuclear weapons. It depends entirely on the size of the aggression.

One problem we are coming into is: What are nuclear weapons? There are nuclear weapons which are now used as tactical weapons. It would be very hard to limit the use of that type of nuclear weapon. However, I do not think it means, necessarily, that the forces of retaliation will necessarily be used, but they are there, available, and they are the strong deterrent.

Mr. WINCH: From what you say now, as to that phase and purpose, as you visualize it, if it is required—and I hope it never has to be used—the need of the NATO force and the need of our own, as a partner to it, is the need of a holding force, a fast, highly mobile, hard-hitting force, able to move very rapidly; and for the purpose of holding aggression the strength must be to hold them back with anti-tank guns, fast moving vehicles, and things of that nature. Is that the type of equipped and trained force we have in NATO? Or am I wrong in saying that is the type you have to have for the purpose you have outlined?

Mr. PEARKES: As far as our Canadian brigade is concerned, I have said it is a motorized brigade now. That means it can move on wheels, not entirely across country, but the modern vehicle has a good cross-country performance, and it can certainly move rapidly where there are roads from one point to another. It is equipped with anti-tank weapons, anti-tank rifles, which are new anti-tank weapons; and, of course, the tanks themselves. As I say, we are improving the guns on the tanks, and improving the armour.

Mr. WINCH: Could I ask, on this question of tanks, along the line you have just mentioned now: Are the Canadian Forces equipped with heavy Centurion class tanks, or the medium, fast-moving tank? I do not know the terms; I was in the infantry myself, and not the tank corps.

Mr. PEARKES: I think there is only one type of Centurion tank.

Mr. WINCH: Is that a heavy one?

Mr. PEARKES: That is the heavy Centurion tank.

Mr. WINCH: That is one of the heaviest of the tanks?

Mr. PEARKES: Yes.

Mr. WINCH: On what basis do you use the heaviest of the tanks, or why are they equipped with the heaviest of the tanks for the type of warfare you have been saying they might have to engage in?

Mr. PEARKES: I think it is inevitable—indeed, I think you can take it for certain that the Russians would have their tanks being used in an operation which might be carried out. Therefore, we must have a tank with sufficiently heavy guns to be able to meet the Russian tank. That is why, because of the improvements in the Russian tanks in recent years, we have considered it necessary to up-gun the Centurion tank, placing a heavier gun, a quicker firing and more accurate gun, in it, than the Centurion had.

The CHAIRMAN: It is quite a fast-moving tank, anyway?

Mr. PEARKES: Yes.

Mr. SMITH (*Calgary South*): This is the same reason you have up-graded the majority of your weapons.

The CHAIRMAN: I wonder whether it would be agreeable to leave off on this note, because it is 5.15 and we will reconvene here on Friday morning at 9.30? Agreeable?

Agreed to.

## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

FRIDAY, June 17, 1960.

(14)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Fairfield, Halpenny, Hellyer, Parizeau, Smith (*Calgary South*), Thompson, Winch.—9.

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (*Finance*); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns.

The Committee resumed from Wednesday, June 15th, consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61.

Mr. Armstrong filed answers to questions asked by Mr. Winch at the previous sitting and it was ordered that these be printed as an Appendix to the day's printed record of Proceedings. (*See Appendix "A"*)

The Minister and Mr. Armstrong were again questioned in respect of NATO.

And consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61 still continuing, it was adjourned until the following meeting.

At 10.45 o'clock a.m. the Committee adjourned to meet again at 3.30 o'clock p.m. Wednesday, June 22nd.

Antoine Chassé,  
*Clerk of the Committee.*





## EVIDENCE

FRIDAY, June 17, 1960.

9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

You will recall at the last meeting that Mr. Winch requested certain information in regard to weapons. Mr. Winch now has a copy of this list. I would ask for the permission of this committee to print this list. (See Appendix "A")

Mr. Winch, as we closed off the last meeting you were asking questions regarding Centurion tanks. Do you wish to continue your questioning in this regard?

Mr. FAIRFIELD: Mr. Chairman there was a question asked last week, concerning civil defence, about the authority of the government to call in volunteers, and a discussion in regard to the coverage of those volunteers in the event of injury.

The CHAIRMAN: Yes. We did not receive all the information in that regard.

Mr. FAIRFIELD: Is that information available today?

The CHAIRMAN: Is that information available today Mr. Minister?

Mr. E. B. ARMSTRONG (*Assistant Deputy Minister, Finance*): Perhaps I could answer that question. The question that has not been answered dealt with a matter of detail. We have not as yet got that answer. I have here the annual report of the Department of National Health and Welfare. This problem, incidentally, does not come under our department. We are not responsible for this aspect of civil defence.

With regard to compensation agreements, it is stated in this report that, in respect of enrolled civil defence workers, all the provinces with the exception of Quebec and Prince Edward Island have executed compensation agreements with the federal government permitting compensation to be made on a 50-50 sharing basis for the injured while in training.

Mr. FAIRFIELD: Did you say while in training?

Mr. ARMSTRONG: While in training. I understand that the question of compensation in respect of other volunteer civil defence workers is still under discussion. There are no agreements in existence at this point.

Mr. FAIRFIELD: In the case of an emergency, if these people were in a danger area, they would be under the direction of the army, would they not, and not the Department of Health and Welfare?

Hon. G. R. PEARKES (*Minister of National Defence*): If they were working in a devastated area they would have to come under the control of the army. In fact, unless they were properly equipped, they could not be allowed to go into a devastated area. Any individuals who were in the area would have to be taken out and decontaminated, and tested to see how much radioactive elements they had received.

I believe that all the administration within the devastated area must be an army responsibility. All the administration outside of the devastated area would be a civilian responsibility.

If civilians enlisted or volunteered to go into a devastated area I would consider,—and this is only an opinion because no rule has been given,—that

they would be treated very much in the same manner as the militia. These individuals would come into the picture on the same basis as the militiaman who was called up.

Mr. FAIRFIELD: There has been no definite policy established in this respect as yet?

Mr. PEARKES: The detail has not been definitely laid down, but what I have suggested seems to me to be the sort of thing that would be fair to all concerned.

The CHAIRMAN: Mr. Winch, do you have any further questions in regard to Centurion tanks?

Mr. WINCH: Not at the present time, Mr. Chairman.

Mr. SMITH (*Calgary South*): Mr. Chairman, I would like to ask a question or two of the minister, and I must apologize because conceivably part of the information I am looking for may have been supplied at the last meeting. If that situation is so, I know the chairman will inform me. I have not had the opportunity of reading the minutes of the last meeting so I am unaware of what was covered then.

First of all I would like to ask the minister, at what time does he, as a representative member of the cabinet, review the ever changing role of the Canadian forces as part of our contribution to the NATO alliance. The simple answer presumably would be, at the NATO conferences that he attends. But, what I am speaking of more specifically, and I used the words "ever changing", is, assuming for the sake of argument that the decision leading up to the change of the role of our aircraft, and the re-equipping of our air division, is something that happened over a period of time, is there anything you can say to us as to how these decisions are arrived at? Are they arrived at by constant association with General Norstad, and the minister's own staff?

Mr. PEARKES: There are constant associations with the SHAPE staff. We have, as I said in my opening address in respect of NATO, a permanent representative in Paris of ambassadorial rank, namely Mr. Leger. He meets daily with his opposite numbers. He has a major general who is his military advisor, and he is meeting daily with the officers of SHAPE. Any suggestions which come up are sent through to Canada, and in the way of an annual formal review there are comments made. Late each summer at in what is called the country chapter of the annual review any recommendations for changes, criticisms which are made, or complaints that are made there are sent to Canada where they are reviewed by myself and the officers of the department. If these are large and important in nature, they are of course referred to the cabinet defence committee or to the cabinet, and a reply is sent back to SHAPE. Then these suggestions or changes can be discussed at the ministers' conference which is held each December.

Mr. SMITH (*Calgary South*): In regard to the re-equipment of the air division, then, Mr. Minister, this was brought about for some reason. Would you perhaps tell me why it was brought about and what was the purpose of the changed role which was assigned to the air force in this respect?

Mr. PEARKES: One reason was that the F86 sabre was becoming obsolescent.

The second reason was that the air defence role was being assumed by the air forces of the continental partners of NATO. When we first entered NATO there was practically no immediate air defence. The air defence role can be taken on by the air forces of our European NATO allies to a much greater extent.

The third reason this was done was because of the increasing area of the battlefield owing to the increasing range of the modern weapon.



Mr. SMITH (*Calgary South*): Your explanation, sir, then leads me to ask the question I wanted to ask with respect to the brigade in Europe.

You say at page 228 of the minutes of this committee's meeting held June 3, that the basic role of the fourth Canadian infantry brigade group is to assist in the protection of western Europe by delaying any advance that might be made by enemy ground forces. We discussed in some detail at our last meeting its purpose. I am wondering if perhaps, because of the nature of the type of conflict that might occur, and the need for still greater mobility, and obviously air power which is going to be essential, whether there is any feeling on the part of the government or the alliance itself that the brigade should be even more mobile, or perhaps that its concentration is greater than it should be. I am just wondering if you feel that you have the proper balance between the brigade units and aircraft.

Mr. PEARKES: Brigades, even in a defensive role, will occupy much greater areas of territory than they did, say, in World War II.

Mr. SMITH (*Calgary South*): Yes.

Mr. PEARKES: That means that in respect of a nuclear battlefield there must be far greater mobility than could have been provided with the equipment used in World War II. To try and meet this situation we sent over enough motor vehicles so that all personnel could be moved with the vehicles actually in the brigade area at the time. That is the present situation.

As you may know, Canada has been developing an armoured fighting vehicle commonly referred to as the Bobcat. Now the Bobcat will move us one step further in the direction of mobility of the brigade in Germany.

Other countries are following a similar practice. The British are working on a British type of vehicle, what they call a family of vehicles, which will be armoured, and which will have very much the same characteristics as the Canadian Bobcat. They also will have several varieties. There may be the straight infantry variety; there is the artillery variety and a supply variety, and there will be an ambulance variety. This will give greater mobility. That vehicle is in the last stages of development.

Development on the Bobcat should be completed by September, and this is promising. At the end of the year if a decision is made to go into the production of this vehicle we will have the blueprints, etc., ready so that we can go to tender. There is sufficient money to cover this. There is some \$600,000 in this year's estimates which will complete the total development of this equipment. There has already been spent approximately \$3 million on the development of this vehicle.

Mr. SMITH (*Calgary South*): Mobility is the key, quite obviously, in respect of this brigade rather than any other force?

Mr. PEARKES: That is right.

Mr. SMITH (*Calgary South*): I may come back to this subject later, Mr. Chairman.

Mr. HELLYER: Mr. Minister, it has been said that deterrent is the best and most effective defence. Do you agree with that statement?

Mr. PEARKES: The statement is that the deterrent is the most effective defence?

Mr. HELLYER: Yes.

Mr. PEARKES: That is of course a NATO concept. The feeling is that the deterrent is an objective for all our military preparations.

The deterrent consists of two main factors; the forces, which are commonly referred to as the shield forces, and the forces of retaliation which are frequently referred to as the sword.

Mr. HELLYER: Does the minister think that Canada should contribute to the deterrent, or do you feel we are already contributing to the deterrent?

Mr. PEARKES: I feel we are already contributing to the deterrent. Mind you, I insist that the shield forces form part of the deterrent. I do not know whether you are trying to suggest that the only deterrent is the force of retaliation, but I do not agree with that.

Mr. HELLYER: My next question would be; do you think Canada should contribute to that part of the deterrent which forms the forces of retaliation?

Mr. PEARKES: When NATO was first organized the role of providing the force of retaliation was given to the United Kingdom and to the United States. Canada has not made any major contribution to either the British B bomber force or the SAC force.

Mr. HELLYER: Would you not recognize our new role of strike reconnaissance as part of the tactical air command or part of the force of retaliation?

Mr. PEARKES: I would not consider it so, because the range of the strike reconnaissance aircraft is limited. First of all their role would be reconnaissance, and secondly to strike at centres of concentration of forces and centres of enemy activity, and also to attack targets of opportunity, as we used to say in the last war. Those targets would be moving targets such as a column of troops being moved up to the battlefield some distance behind the actual front. The war will have started before our strike reconnaissance aircraft are used.

Mr. CHAMBERS: Is it not correct, Mr. Minister, this is a tactical rather than a strategic weapon?

Mr. PEARKES: Mind you, tactics and strategy verge so closely that it is pretty hard really to decide. If the old-fashioned definition of strategy—troops moving up to the battlefield, the placing of troops in position for a battle—were applied then, of course, you would have to say they would be strategic weapons, but I do not think that can apply.

Mr. CHAMBERS: The way the term is used today, anyway,—a strategic air command of the United States, and the V bombers—they are not in that area?

Mr. PEARKES: They are essentially the forces of retaliation. I would say these are aircraft which can influence the immediate battle.

Mr. HELLYER: Does the minister feel the strategic air command should be under NATO control?

Mr. PEARKES: I do not know I should express an opinion on that. NATO has allocated this particular role to the United States and to Britain. That was concurred in by the government of Canada when that decision was made. As we have no part of the SAC bombers, I do not think it is for me to express an opinion whether I think or do not think they should be under NATO. That is a matter more for foreign policy to settle.

Mr. HELLYER: Is there not a possibility of duplication, however, Mr. Minister, when you have tactical aircraft of the shield forces under NATO control carrying atomic weapons capable of penetrating enemy territory, at least to a degree? They would have sufficient range to go into enemy territory and, thus, there is the possibility of duplication of part of the task which had previously been assigned to strategic air command and the royal air force?

Mr. PEARKES: If there is any fear of duplication, it would be the commanders' responsibility to ensure the same target was not attacked by two or three different forces.

Mr. HELLYER: Let us assume, Mr. Minister, there was a warning of an all-out attack. Say the BMEWS had picked up missiles flying through the

air and there was a 15-minute warning, and this warning was relayed to all commands throughout the world. Undoubtedly, in two or three years there would be Russian missiles pointed at all the air bases in Europe at which tactical air command aircraft would be stationed. Presumably, some of these tactical aircraft would be on an alert, and there would be time within the warning period to get them off the ground. They would have to assume, I am sure, that their air fields would be destroyed before they could return. What would they do, under those circumstances, with their atomic load; and what would happen to them after they had delivered it?

The CHAIRMAN: It is pretty nearly hypothetical, but go ahead, Mr. Minister, if you wish.

Mr. PEARKES: I do not think I can answer that question in detail. I suppose some would drop their atomic bombs on to the targets which they were directed to attack. Others might have to return to pre-designated bases which they could get to.

If you are concerned about the danger of an atomic weapon going off without actually being fired, all the evidence is that there is practically no danger at all of an atomic warhead exploding on account of heat, on account of the plane crashing, or anything like that.

Mr. HELLYER: That was not the thing that concerned me, but if these planes took off, or just part of them which were on the short alert, and then realized that, likely, in a matter of a few minutes they would not have any airports to which to return, they, or some of them, at least, would go to the assigned targets and deliver their bomb load. At least, in this way they would have carried out a mission before having to decide whether they would abandon the aircraft.

The real concern here is duplication between this bombing they might do under those circumstances and the role assigned to strategic air command. General Powers told us, when we were visiting him last year, this was a matter of real concern to him. This, he told us, was not classified.

Mr. SMITH (*Calgary South*): This evidence we are having introduced by Mr. Hellyer is substantiated?

Mr. HELLYER: He told us that he had a war plan being changed constantly—and this is done electronically—but it is not available to the people in the NATO command. General Powers was concerned for fear some of these tactical aircraft would get on to targets his people were assigned to before they left them. The obvious difficulty would be that targets would disappear, radioactive fallout would have been created, and a real danger would accrue to pilots and crews of strategic air command bombers as they went on their way to their assigned targets. It seems to me this is an unresolved problem which is of real concern not only to the strategic air command but also to all members of the NATO alliance, and particularly to those which plan to buy and equip aircraft which might be playing a part in this role.

The CHAIRMAN: It seems to me I was at the same meeting, and I do not think he was nearly as concerned as you think he was.

Mr. SMITH (*Calgary South*): Just as a matter of record, I would like to know the source of the evidence that is now being given by Mr. Hellyer with respect to General Powers.

Mr. HELLYER: It was a personal conversation.

Mr. SMITH (*Calgary South*): Fine.

Mr. PEARKES: Surely, those matters are problems which must be worked out by the commanders themselves?



Mr. HELLYER: I realize this is a problem which must be worked out; but it seems to me so fundamental—involving, as it does, the relationship in the structure and function between the strategic air command and the NATO shield force—that it might have to be worked out at the level of NATO ministers.

Mr. CHAMBERS: I wonder if Mr. Hellyer would tell us whether General Powers suggested that NATO should come under SAC or SAC under NATO?

Mr. HELLYER: He made it very clear that he thought that all elements of the deterrent force should be under a single, unified command.

The CHAIRMAN: And under his command.

Mr. SMITH (*Calgary South*): May we draw a parallel at all—and, admittedly, there are a few—but, certainly, in the last war, where we had as many as eight air forces at that time also operating basically under a single, unified command—surely, the answer you gave is correct, that it is the commanders' responsibility to see this duplication did not occur. Is not this a typical example of what would take place, even under the circumstances of the NATO alliance and SAC—the same principle applies?

Mr. PEARKES: I feel sure that if such a problem exists—and from what Mr. Hellyer said, it is obvious the commanders are aware of it—they would work out a solution to avoid duplication.

Mr. HELLYER: I think the commanders are aware of it, but the problem is they do not see it being resolved. This is where the members of the NATO alliance and ourselves have not only a function, but a responsibility to play. We are going to have aircraft over there which will be armed with atomic weapons, and which will find themselves part of this general tragedy.

The implications are different in magnitude from those in world war II. If in world war II a few extra bombs were dropped on a target, well, it was just a few extra bombs on a particular target; but if you drop a thermo-nuclear bomb on a target and then fly through the cloud, that is going to kill the members of aircraft too.

Mr. SMITH (*Calgary South*): General Powers' alleged concern has not, in any way, been substantiated, and is purely an expression of opinion of the member who is speaking.

Mr. PEARKES: May I say the selection of targets is the commander's responsibility. SAC has liaison officers at NATO, and I am sure this problem will be known and will be represented to the NATO commander at SHAPE; and we have confidence in General Norstad and his staff. We have a Canadian representative on that staff, and I feel this problem will be resolved at that level.

The CHAIRMAN: It seems to me, Mr. Hellyer, this is the responsibility of SHAPE commanders and not the responsibility of this committee.

Mr. HELLYER: Just before you leave that, Mr. Chairman, I do not agree that this is just the responsibility of the commanders, because we, as politicians, and our government, are committing troupes to this area of potential conflict. They might be directly affected by the lack of liaison, or the lack of a clear-cut chain of command and duplication of function, which I have referred to.

The CHAIRMAN: What would you suggest we do, Mr. Hellyer?

Mr. HELLYER: I was asking the minister if he thought the deterrent should be under a single, unified command, or whether SAC should be under NATO control; or, the solution he would have for this problem.

The CHAIRMAN: I do not think it is the minister's responsibility to have a solution for this problem. It was pointed out by the minister this is the responsibility of SHAPE.

Mr. HELLYER: But the minister is asking us to spend the taxpayers' money to buy planes to carry potential atomic bombs which in the case of all-out war would have nowhere to go, except for ten or fifteen minutes over enemy territory with their bomb load; and they would create this problem. I think it is reasonable for the taxpayers of Canada to know what the arrangement would be.

Mr. PEARKES: I think the answer is this: Canada has complete confidence in the NATO commander. We know that liaison facilities exist between SAC and NATO, and I am quite certain that these tactical problems will be resolved at that level.

Mr. SMITH (*Calgary South*): Might I ask you, sir, this—perhaps to satisfy the member who has asked you these questions: if General Powers has this concern, do you share it? I assume, from your answer, you do not and that the commanders themselves could avoid this duplication.

The CHAIRMAN: Mr. Carter?

Mr. HELLYER: Would you answer that, Mr. Minister, so we can have the answer on the record? I did not quite gather whether you share this concern that there would be duplication in a situation where the NATO commander and the tactical aircraft are not aware of the SAC plan and strategy from week to week.

Mr. PEARKES: I am not in a position to say that the NATO commander is not aware of the SAC plan. I say there is a liaison system established between SAC and NATO; that, I know, exists.

Mr. HELLYER: But obviously it cannot be satisfactory, otherwise General Powers would not be concerned for the safety of his personnel.

Mr. SMITH (*Calgary South*): We do not know that he is.

Mr. PEARKES: I did not hear what General Powers said, and I have no comments to make on that. He did not express that concern to the Canadian government; nor has the commander at NORAD expressed that concern.

The CHAIRMAN: Mr. Carter?

Mr. CARTER: I have several questions, but I would like to start with where Mr. Smith left off.

The CHAIRMAN: That is perfectly all right. Go ahead, Mr. Carter.

Mr. CARTER: On the question of mobility: mobility, of course, must be defined. There are two categories of mobility: one is being able to move fast in the area where you are; and then there is the other sense, in which you move men and equipment from one area to another, even to another country at some distance.

I think the minister gave an example at our last meeting, when he spoke of the U.S.S.R. thinking they might get away with grabbing a small bit of Turkish territory, in the hope they could get away with it, and thinking NATO would not take any action. That is a very real danger, and in the event that something like that happened are our troops mobile, so that we could move troops from Europe to Turkey? Are we mobile in that sense, as well?

Mr. PEARKES: Canadian troops could not be moved out of the area to which they are now assigned without the consent of the Canadian government, in the first place. If they were to move a long distance—be it to another of the NATO commands—they would require air transport, rail transport or ship transport to do it. Now that transport is not readily available under the Canadian command in Europe. That transport would have to be made available by the supreme allied commander. As I pointed out in an earlier statement, we have and are getting a considerable enlargement to our transport command; but that will be based here in Canada.

Mr. CARTER: The same would be true of all other units of other nations making up NATO: they could not be moved to another country without going back and checking with their respective government.

I am trying to get at the overall concept of NATO, of how NATO is supposed to function.

Mr. PEARKES: The troops are allocated to NATO. The supreme allied commander, then in agreement with the Canadian government, assigned those troops to a certain subordinate command. We are assigned to, and it was agreed to by the Canadian government that they should serve in, the central European area. Now, I do not think that the supreme allied commander, for one moment, would move them out of that area without the consent of the Canadian government. I would expect him to inform—and I know he would inform the Canadian government, or ask permission for the troops to be moved out of the particular command in which they are serving.

Mr. CARTER: In the light of what the minister has said, it would seem to be a very good strategy for Russia, if she were to contemplate an attack or an aggression, to make a little diversion somewhere, in a country like Turkey, and in sufficient numbers so that the Turkish army would require assistance from outside. Then NATO troops would have to be drained off from somewhere. Or is it the concept that we do not drain NATO for any country, but that they are there to act as a shield for that part of Europe where they are, and are not to be diverted?

Mr. PEARKES: I am certainly not going to try to help the Russians out by telling them what would be a good strategy for them to adopt.

Mr. CARTER: I do not think they need anybody to tell them.

Mr. PEARKES: I am certainly not going to tell them.

The CHAIRMAN: They certainly will not read it in the minutes. Any further questions, Mr. Carter?

Mr. CARTER: Yes, I have several questions.

Mr. PEARKES: Might I point out that Turkey is part of the allied forces, part of the Mediterranean command of NATO—

Mr. CARTER: Yes, but is NATO not built around the concept that an attack on one member is an attack on all?

Mr. PEARKES: Yes.

Mr. CARTER: Surely, that means that if one country in the NATO alliance is attacked, the other countries must come to her assistance?

The CHAIRMAN: I think the minister tried to explain that, when you interrupted him, Mr. Carter. Mr. Minister, you said Turkey is part of the southern command of NATO?

Mr. PEARKES: Yes, Turkey is part of the southern area of NATO and, obviously, those troops which are in the southern area would be the first which are immediately available. We have agreed to supply troops to NATO and have agreed with the NATO commander that they should be stationed in central Europe. If the situation developed so that it were necessary to send Canadian troops to some other part of the NATO front—either the northern, Mediterranean or southern front—that would require the concurrence of the Canadian government, to move them out of that area.

Take, for example, in world war II, the Canadian government consented to the movement of the Canadian 1st division to Africa. The Canadian government agreed that the Canadian troops could be employed partly in Sicily and Italy and partly in northwest Europe. The government has control of the Canadian troops. They cannot, when they are placed at the disposal of an allied commander. There are certain limitations to what he can do with Canadian troops.



Mr. CARTER: Perhaps I could phrase my question in a different way, Mr. Chairman.

When the overall requirements of NATO were being worked out and the contribution of each NATO country was being determined, were the requirements of NATO's mobility—in this wider sense of having to rush troops from the northern command to the southern command—taken into consideration? In other words, is NATO prepared for that kind of contingency?

Mr. FAIRFIELD: Surely, these are overall strategic questions and, certainly, a lot of people behind the Iron Curtain would be interested in the answers? I do not think they should even be considered.

The CHAIRMAN: Mr. Carter, have you another point you wish to ask about?

Mr. CARTER: I do not see any harm in letting the people behind the Iron Curtain know we are prepared.

The CHAIRMAN: Well, we are.

Mr. CARTER: Having determined our Canadian contribution, which is worked out by agreement—what Canada is going to provide in the way of air divisions, and so forth—when we come to prepare these estimates we have before us, are they based on what these troops need at the moment to perform their proper role, or are they based on the priority of requirement within the overall defence budget?

Mr. PEARKES: We have to take into consideration what the troops require for their immediate role. We have a number of jobs to do—we have the air defence of the North American continent; we have talked about national survival, and everything else. We have to balance that with what the country can afford to pay. Therefore, there has to be an order of priority. I would say that there are forces in Europe well equipped to carry out the role which has been assigned to them.

Mr. CARTER: Is it fair to assume that in the case of emergency of attack that our infantry troops would be subject to attack from ground attack aircraft?

Mr. PEARKES: I do not know what the Russian's plans are; they might.

Mr. CARTER: Are we prepared for such an attack?

Mr. PEARKES: Yes.

Mr. CARTER: Do we have the equipment?

Mr. PEARKES: Yes.

Mr. CARTER: Do our troops have ground attack aircraft of their own?

Mr. PEARKES: Our brigade has no ground attack aircraft. We have no air element with our brigade except a few light planes for artillery reconnaissance and communication purposes.

Mr. CARTER: Is that kind of support available to our troops from other NATO units?

Mr. PEARKES: Certainly. Larger formations provide that type of support.

Mr. SMITH (*Calgary south*): Mr. Minister, you will recall that just prior to the re-equipping of the air division—which unquestionably on its merit of replacement of the Sabres, from a military standpoint, was a most necessary move and one which of course was very welcome by NATO—that General DeGaulle took certain actions to raise his fleet and also with regard to United States aircraft located in France. One was led to believe that the morale of NATO at this point was extremely low—that is to say the morale of the contributing countries in the alliance. I already have stated that we concede the need for the re-equipping of the air division, based on military purposes. This question, however, often is asked in Canada; that is, whether or not our move in re-equipping the division was purely on a military basis or whether it was in any way on a political basis in the hope of keeping the

alliance together. Undoubtedly, this did have an effect in lifting the morale. Editorially this question has been asked a great many times, and I would like to hear the minister on this: was it purely on a military basis?

Mr. PEARKES: It was on a military basis.

Mr. SMITH (*Calgary South*): But you do not deny it did have a great effect on morale?

Mr. PEARKES: There was a military need for the re-equipping of those Sabre squadrons and on that military need the decision was taken. I agree with you in respect of the forces being re-equipped that the statement made by the Prime Minister when he visited those forces to the effect that they would remain in Europe so long as needed had a great effect upon the morale of the forces of other nations.

Mr. SMITH (*Calgary South*): It would be wrong, of course, to ask you if you are satisfied with the balance of the forces you are contributing to NATO, because you would not do it unless you were satisfied; but is it not likely that in the next year or so that this balance of our present contribution, based on requirement, could take a sizeable change? I am not attempting to make a forecast in respect of the brigade in any respect, but is there any likelihood in the near future?

Mr. PEARKES: As the German army is recruited up to strength there will be more German troops available than there are at the present time and the German army and the German air force will be in a stronger position in a few years time than it is today. That, of course, will make a difference in the percentage of the contribution by the different powers.

Mr. SMITH (*Calgary South*): Does this necessarily forecast the inevitable withdrawal of the brigade then, Mr. Minister?

Mr. PEARKES: I cannot answer that.

Mr. SMITH (*Calgary South*): You show here costs of \$96 odd million for the air division and \$38 odd million for the brigade. Of course, that is what we might call the bare cost, because it does not include the equipment or training. Would it be possible to get the actual cost of our total contribution based not only on the training of personnel but also the equipment? Is this figure readily available?

Mr. ARMSTRONG: The figure in respect of the equipment is available readily, but not including training. We do not have any satisfactory way of allocating the overhead costs to this brigade as against the rest of the army. We can give you the operating cost plus the equipment.

Mr. SMITH (*Calgary South*): Also in respect of the air division?

Mr. ARMSTRONG: Yes.

Mr. SMITH (*Calgary South*): Perhaps that could be filed.

Mr. PEARKES: All that is given in this handbook.

Mr. SMITH (*Calgary South*): I apologize. I thought that only was in respect of a yearly basis.

Mr. PEARKES: Yes; it is on a yearly basis. We cannot say that it costs so much to train a soldier here in Canada, taking into consideration all the buildings and that sort of thing, nor that a certain percentage should be allocated to NATO because an individual soldier might not even get there.

Mr. SMITH (*Calgary South*): As I am sure you will concede, the commonwealth air training program was extremely successful, and for some time following it, Canada had an agreement to which we made some reference in the committee earlier whereby we trained pilots of certain NATO countries. Eventually this came to an end when the countries concerned were able to

train their own crews. I am wondering whether you have made the suggestion, in view of our flying weather and our ability to produce aircraft, that perhaps we could make a greater contribution by inviting more countries to train within Canada, naturally on a different basis than previously because that was not a good financial operation. I am wondering, for example, whether or not the United Kingdom would welcome the opportunity of training its NATO forces—or for that matter any other country—in Canada?

Mr. PEARKES: There has been no suggestion made that these countries would wish to train forces here in Canada. In fact when the Germans were looking for training bases outside of Germany they made a very definite statement that the North American continent was too far away for them to consider training their forces here. There may be individuals who are training here with the air force. Some of the NATO countries still have a few individuals training in Canada. There are a few special cases of personnel of other forces coming to visit Canada and receiving some training here by means of attachments and special courses. There has been, however, no request for the actual training of forces here in Canada.

Mr. SMITH (*Calgary South*): I can understand there has been no request, but do you not see any advantage in suggesting that this could be a very vital contribution by our country?

Mr. PEARKES: If there is any thought of this being done and any desire expressed by another country it would have to be given consideration by the government.

Do you want the figures now?

Mr. SMITH (*Calgary South*): Please.

Mr. ARMSTRONG: These are the figures including equipment. The figure for the brigade is \$41.7 million and for the air division \$165.2 million; that is for 1960-61.

The CHAIRMAN: Mr. Winch, you are next.

Mr. WINCH: I notice that the Canadian brigade in Europe is not equipped with any anti-aircraft weapons. Does that mean that some other country supplies the anti-aircraft squadrons on the Canadian bases.

Mr. PEARKES: Yes. We provide a brigade. The brigade is a part of this element. If there is attack by aircraft against ground troops—that is a form of tactics which might be used—the defence against attacking aircraft will be provided by the second tactical air force or by the British anti-aircraft, or by such ground to air missiles as are established in the area.

Mr. WINCH: Outside of the weapon area, there is one point in which I am quite interested. Perhaps the minister would explain this. Under the terms of NATO there is article 2. How is article 2 handled, and what position does Canada take in trying to enlarge the scope of article 2?

Mr. SMITH (*Calgary South*): I believe this is economic cooperation.

Mr. PEARKES: This would not come under the Department of National Defence. It would come under the Department of External Affairs.

Mr. HELLYER: Mr. Minister, the opinion has been expressed often that the NATO shield forces would be committed to the use of atomic weapons, if not at the outset, very soon after any hostility broke out even on a limited scale, and this has created a fear that the NATO shield forces would be the first to use atomic tactical weapons. Do you believe that opinion?

Mr. PEARKES: I think it depends entirely on the circumstances whether or not they are the first. I can see situations which might arise whereby they would not be the first to use tactical atomic weapons.



Mr. HELLYER: Do you feel that any units in the NATO shield, even though they are equipped with conventional weapons, should be trained in the use of tactical atomic weapons in case it becomes a necessity for their use.

Mr. PEARKES: Yes. I see no reason why they should not be trained in the use of atomic weapons in case they have to use them.

Mr. HELLYER: A specific examination of the decision to acquire the Honest John rocket launcher, which is capable of carrying a nuclear warhead, brings us back again to the potential difficulty involved in respect of custody and control. Would atomic warheads, under these circumstances be attached to the weapons even though they were under United States control?

Mr. PEARKES: I really could not answer that, because I do not know the technical details. I do not know whether or not there is anybody here who does know the technical details regarding the actual attachment of these nuclear warheads to the Honest John.

Mr. HELLYER: Have we concluded the agreement with the United States in respect of the control and use of atomic weapons?

Mr. PEARKES: No. That still is the subject of negotiations.

Mr. HELLYER: Presumably you would not know either how long it takes physically to attach the atomic warheads in the event they were stored separately.

Mr. PEARKES: I do not have that detail.

Mr. HELLYER: Perhaps we could get this at a later time. Perhaps the minister could explain the mechanics by which authority is given for the use of atomic weapons.

Mr. PEARKES: At the present time negotiations are proceeding with the United States for the general use by Canadian forces and the storing of atomic weapons in Canada for the use either by United States or Canadian forces. These negotiations are not complete. When that general agreement is complete then special agreements will have to be arranged with the commanders concerned, such as the supreme allied commander in Europe and the ACLANT commander.

Mr. HELLYER: Perhaps these arrangements are not worked out yet in detail.

Mr. PEARKES: The arrangements are not complete.

Mr. HELLYER: What I would like to know, as soon as the information is available or as soon as agreement is reached, is whether the president of the United States will have to be consulted before these weapons are used. As you know, in respect of the strategic air command, they are not allowed to use their offensive weapons without his permission. Can the defensive atomic weapons be used on the authority of some lesser person, such as the commander in the field?

Mr. PEARKES: My understanding is that the authority has to come from the president of the United States before nuclear weapons are used. These warheads belong to the United States and permission to use them has to be obtained from the United States. That permission having been granted to Canada to use these weapons, then the decision is made by Canada as to whether or not she will take advantage of that permission given by the United States.

Mr. HELLYER: This, Mr. Chairman, raises a very real problem which I do not think we yet have faced. In respect of the strategic air command it is understandable that the commander has the authority to put the aircraft in the air and head them in the general direction of the target; they can go to a certain line, but not beyond without positive orders to carry on. This



allows several hours, under ordinary circumstances, for the chain of command to operate, for the president of United States to be located, and for him to decide whether or not to go into battle and to issue the order. However, the problem which in my opinion has not been faced yet is what happens to the missiles, long and short range, and other weapons on the ground which are not mobile and which cannot be put into the air over a period of time while the decision is being made. In other words, this is the same problem which applies to tactical aircraft. They have only a few minutes reaction time in the event of use—perhaps ten or fifteen minutes. What do they do? Do they drop their bombs? Do they leave their aircraft on the ground? Without positive orders what would happen?

Mr. SMITH (*Calgary South*): I suggest if somebody is shooting at you it becomes pretty academic.

Mr. HELLYER: It is academic but it is also a very real problem.

The CHAIRMAN: This is very hypothetical but go ahead.

Mr. HELLYER: Future wars all are hypothetical. A problem arises in the use of missiles and offensive weapons which we might have stored under American control—atomic warheads—in respect of the chain of command and the time lapse in getting orders through when there is a reaction time comprising a few minutes. I would like to have a statement by the minister, at the earliest possible date, as to just exactly what happens in each of the ten minutes from the time a warning is given and how you would operate and put into effective action your forces in that length of time.

The CHAIRMAN: You would like that information on record here?

Mr. HELLYER: Yes.

The CHAIRMAN: I think the Russians would too.

Mr. PEARKES: I can only give this to you in general terms. The nuclear weapons cannot be used until they are released by the president of the United States. They then would be released to the supreme allied commander in Europe.

Mr. HELLYER: I have one or two general questions. I understand the minister's difficulty because quite obviously the terms of this as yet have not been worked out precisely.

Mr. FAIRFIELD: I disagree with that. I do not think it is a correct statement that quite obviously it has not been worked out. It may have been worked out, but nobody would like better than the Russians to know how long it takes to get our deterrent forces into the air. I think it is a ridiculous question.

Mr. HELLYER: I do not think it is a ridiculous question, because it involves the lives of the Canadian troops and the security of the Canadian nation. There is the important question of the reaction time in getting a positive command from whomever has the ultimate authority to the people who have to exercise it. This problem has been posed in respect of the troops in Europe. Direct telephone and cable communications possibly would be cut if there is an all out war. This almost inevitably would be the enemy strategy. Radio communications are slower and lack positive control. I think it is a matter of real concern as to the difference between the academic necessity under all circumstances of obtaining the authority of the president of the United States or, as Mr. Smith has inferred, the almost automatic reaction of the commander in the field.

The CHAIRMAN: When you and I were down there we heard that if the communications were broken they could rely on one or two other alternatives. We did hear that. I feel this whole field definitely is out of order. I believe the Russians would be quite interested in knowing what we are going to do.

Mr. FAIRFIELD: Particularly in respect of the reaction time.

Mr. HELLYER: I have a feeling that some of the troops would be anxious to know.

Mr. FAIRFIELD: You would not be in them anyway.

The CHAIRMAN: Mr. Winch, I believe you have some questions.

Mr. WINCH: There is one phase which interests me. In Europe we are a partner in NATO so the action of one naturally involves all other members of the partnership. In the event of aggression who makes the decision as to whether or not the NATO troops will start using other than conventional weapons? This is not hypothetical. I take it in the event of there being a change from conventional to a nuclear type of warfare a decision would have to be made immediately and there would not be time for all the governments to be consulted as to whether or not a nuclear warhead or weapon could be used. That would just be impracticable. If my contention is correct, we are all partners and all are involved, whether we like it or not, by the action of one. Has the government presently given its consent or its authority to the partners in Europe which have the nuclear warheads to go ahead and use them, because I cannot conceive the authority being given afterwards.

Mr. SMITH (*Calgary South*): This is the same question.

Mr. WINCH: I cannot conceive the authority being given afterwards, if it has not already been given, that they can go ahead and use it.

The CHAIRMAN: I feel that is in the same field. If you wish to answer it, go ahead, Mr. Minister.

Mr. PEARKES: I was going to ask a question. Are you asking whether the Canadian government has given authority for other governments to use nuclear weapons?

The CHAIRMAN: That is basically the question, is it not?

Mr. WINCH: Inside the partnership of NATO—because if it is used, we are going to be affected in Canada, or we are going to be involved in it.

Mr. PEARKES: I think, in general principle, the possible use of atomic weapons, in the event of attack, has been recognized by the NATO council.

Mr. WINCH: And so those that hold them can go right ahead and use them, without there having to be any further consultation—which I maintain would be impossible anyway? So it is already understood that they can go ahead if, on their own decision, they think it is necessary?

Mr. PEARKES: They can only do it if these weapons are released to the Supreme Allied Commander by the President. If they are released—permission is granted, shall we say, by the President of the United States that other allied partners may use these weapons, then it is recognized in NATO council that their use, at the discretion of the Supreme Allied Commander, is permissible.

Mr. WINCH: In the event of aggression in Europe against any of the NATO troops, or NATO countries, the decision as to any change from a conventional type warfare to a nuclear warfare, then, rests wholly, or solely, in the hands of the President of the United States; is that correct?

Mr. PEARKES: I am not quite certain whether that is correct, because we know—

Mr. WINCH: Any decision that has to do with other than a conventional type of war?

Mr. PEARKES: —because we know that other countries, such as the United Kingdom and France, are developing nuclear weapons.

The CHAIRMAN: Mr. Carter, you said you had one question in another field.

Mr. CARTER: Yes, I have a couple of questions.

The CHAIRMAN: We only have a few minutes left.

Mr. CARTER: All right. The minister gave a very clear answer to Mr. Winch about the availability of ack-ack guns.

The CHAIRMAN: That is right.

Mr. CARTER: I am not quite clear about the answer he gave me when I asked for information about what aircraft are available to give air cover to our troops in case of a Soviet ground attack.

Mr. PEARKES: The second allied tactical air force.

Mr. CARTER: They provide that?

Mr. PEARKES: They give the air coverage for the front on which the Canadian forces are operating.

Mr. CARTER: Could you give me the same information as to the type of aircraft that would support—ground attack aircraft—our troops in a counter-attack?

Mr. PEARKES: It comes under the same organization, the second tactical air force, which I am informed is partly British, Dutch, Belgian and German.

Mr. SMITH (*Calgary South*): Mr. Chairman, I should like to ask Mr. Armstrong a question, and this information is conceivably something he might like to obtain for me.

We now have the cost of NATO as being roughly \$206 million, which represents the cost of the brigade and the division. It seems to me that this is still not the actual cost of NATO, because I am looking at certain estimates of our contribution to SACLANT, NATO, and infrastructure.

I would like to get the total cost, to learn exactly what our contribution is, in dollars and cents, to NATO, to include the SACLANT forces and our contribution to the infrastructure; and also the cost of our contribution to any administrative staff.

I do think that to a committee of this nature it is important that we know what these total costs are.

Mr. ARMSTRONG: Yes, I can give you, I think, all the costs now, with the possible exception of administrative staffs.

Mr. SMITH (*Calgary South*): All right. I have the first two figures.

Mr. ARMSTRONG: They were accurate. By the navy, the R.C.N., \$103.2 million; and by the air force, \$63.5 million.

Mr. SMITH (*Calgary South*): What was this for?

Mr. ARMSTRONG: This is to SACLANT, \$63.5 million; and the infrastructure costs and the contribution to NATO budgets are the figures shown in the estimates of \$14½ million.

The CHAIRMAN: Gentlemen, what is your wish as to our next meeting?

Mr. SMITH (*Calgary South*): I am not quite through, Mr. Chairman. Perhaps I could just get this. What was that figure, Mr. Armstrong?

Mr. ARMSTRONG: \$14½ million.

Mr. SMITH (*Calgary South*): May I ask if there are any other costs, such as army service corp costs, fuel, food?



Mr. ARMSTRONG: All of the costs for army service corps, food, fuel, are included in the figures I have given you.

Mr. SMITH (*Calgary South*): So I have now the total costs, with the exception of the training of our forces in Canada?

Mr. ARMSTRONG: With the exception of the training and overhead costs here.

Mr. SMITH (*Calgary South*): There are no other costs in Europe at all?

Mr. ARMSTRONG: In the air force costs, the operational training unit for Sabres is included in the figure I have given you; but the general training costs other than that are not included.

Mr. SMITH (*Calgary South*): We have no other costs—medical, provost?

Mr. ARMSTRONG: No; they are all included. There may be some minor costs of staffs on the international staffs.

Mr. SMITH (*Calgary South*): What do you call minor costs?

Mr. ARMSTRONG: I would say, a fraction of 1 per cent.

Mr. SMITH (*Calgary South*): But no other costs?

Mr. ARMSTRONG: No.

The CHAIRMAN: Gentlemen, it is your choice: we have Monday or Tuesday morning at 9:30, or Wednesday afternoon at 3:30. Those in favour of Monday or Tuesday morning, hands up, please. Very well, gentlemen: Wednesday afternoon at 3:30. Thank you.

—The committee adjourned.

## APPENDIX "A"

*Information requested by Mr. Winch*

1. The following is a list of the items of operational equipment held at 4 Canadian Infantry Brigade Group in Germany:

- a. Motorcycles
- \* b. Tanks Medium (Centurion)
- c. Scout Cars (Ferrets)
- d. Trucks Cargo  $2\frac{1}{2}$  ton
- e. Trucks Cargo  $\frac{3}{4}$  ton
- f. Trucks Panel Utility  $\frac{3}{4}$  ton
- g. Trucks Utility  $\frac{1}{4}$  ton (Jeeps)
- h. Trucks Ambulance
- i. Trucks Dump
- j. Trucks Shop Van  $2\frac{1}{2}$  ton
- k. Trucks Recovery Medium
- l. Truck Tractor and Semi-Trailer 60 ton
- m. Truck Tractor and Semi-Trailer 25 ton
- n. Crane Shovel Truck Mounted
- o. Trailers Cargo  $1\frac{1}{2}$  ton
- p. Trailers Cargo  $\frac{3}{4}$  ton
- q. Trailers Cargo  $\frac{1}{4}$  ton
- r. Trailers Water
- s. Trailers Bath Unit
- t. Grader Road Motorized
- u. Angle Dozer
- v. Tractors

*Aircraft*

- a. Aircraft L-19

*Weapons*

- a. Pistols 9-mm
- b. Rifles 7.62-mm
- c. Rifles Automatic 7.62-mm
- d. Rifles Recoiless 106-mm
- e. Carbines Machine 9-mm (Sten)
- f. Machine Guns .30 Cal
- g. Machine Guns .303 Cal
- h. Machine Guns .50 Cal
- i. Rocket Launchers (Anti-Tank)
- j. Mortars 60-mm
- k. Mortars 81-mm
- l. Howitzers Light 105-mm

Ammunition for the weapons listed in paragraph 2 is held under control of the Commander 4 CIBG.

Department of National Defence

June 16, 1960

2. Armament of Aircraft in No. 1 Air Division RCAF

The Sabre aircraft are armed with .5 calibre machine guns.

The CF-100 aircraft are armed with 2.75 inch rockets.

Training and combat stock ammunition requirements are held at each wing in the Air Division and are thus under direct control of the RCAF.

\*—Equipped with 20 pounder gun.





## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S

WEDNESDAY, June 22, 1960.

(15)

The Special Committee on Defence Expenditures met at 3.30 o'clock p.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Macdonald (*Kings*), Smith (*Calgary South*), Winch.—10

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (*Finance*); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns.

The Committee resumed from Friday, June 17 consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61.

Mr. Pearkes was questioned in relation to the use of nuclear weapons in Canada and on NATO.

At one stage Mr. Winch moved, seconded by Mr. Hellyer,

That the Secretary of State for External Affairs be called to inform the Committee on the state of negotiations between Canada and the United States on the use of nuclear weapons in Canada.

In amendment thereto, Mr. Chambers moved, seconded by Mr. Smith (*Calgary South*), to add the following words: "provided this step be recommended by the Steering Committee".

And the question having been put on the proposed amendment of Mr. Chambers, it was, on a show of hands, resolved in the affirmative on the following division: Yeas, 5; Nays, 4.

The main motion, as amended, was carried on division.

And consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61 still continuing, it was adjourned until the following meeting.

At 5.10 o'clock p.m. the Committee adjourned to meet again at 9.30 o'clock a.m. Friday, June 24.

Antoine Chassé,  
*Clerk of the Committee.*



## EVIDENCE

WEDNESDAY, June 22, 1960.

3:30 p.m.

The CHAIRMAN: We have a quorum, gentlemen. At the end of the last meeting Mr. Smith was asking a series of questions on costs as far as NATO was concerned. I believe, Mr. Smith, you had all the information you wished on that.

Mr. SMITH (*Calgary South*): Yes, Mr. Chairman.

Mr. WINCH: Mr. Chairman, before we go into that, I should like to ask if the minister can do something which I think is rather important. I rather feel that in this committee and in the House of Commons the answers given on certain questions are of such a nature that either a farce has been made of this committee or a farce has been made of the House of Commons.

I put that to you, Mr. Chairman, and ask the minister this question: in view of what he has stated in this committee, and in view of what he has stated in the House of Commons—and the Prime Minister has, also—on the storing, or the use of nuclear warheads in Canada, I find it absolutely impossible to put together the statements made by the minister in this committee, and the minister and the Prime Minister in the House of Commons, with the recent answers that we have got that there are now negotiations going on as to storing, or the use of nuclear warheads in Canada.

I have this afternoon gone over some of the evidence before our committee and some of the answers given in the House of Commons, and I find it completely impossible to put together the answers given us here in this committee and the answers given in the House of Commons as to the position of Canada on nuclear warheads, because both in this committee and in the House of Commons it has been made very, very clear on all the evidence that under no circumstances can there be any nuclear warheads in Canada—nor in our group overseas.

In view, in particular, of the information in the House of Commons this afternoon, I find it completely impossible to put together the statement of the minister before our committee and in the House of Commons and try to arrive at what we are doing.

Therefore, I should like to ask now—and I think it is a fair question and this committee is entitled to a straight answer: our information now is that no nuclear warheads are here; that no nuclear warheads will be here; but there are negotiations as to whether or not they should be here. May I ask the minister if he will now give to this committee a straight and most informative answer as to the position as regards any nuclear warheads in Canada, or overseas in our group.

Hon. G. R. PEARKES (*Minister of National Defence*): There are no nuclear warheads stored in Canada initially. There are no nuclear warheads stored in Canada today. There are negotiations going on with the United States regarding the storage of defensive nuclear weapons for their interceptor squadrons which are at Harmon Field and Goose Bay. Those are interceptor squadrons, part of the NORAD command. They are there primarily for the defence of the area immediately adjacent to those two leased bases.

Mr. WINCH: Are the nuclear warheads there?



Mr. PEARKE: The nuclear warheads are not there now; but negotiations—or, shall we say, discussions, are going on between the United States and Canada as to whether those warheads can be placed on these leased bases for the use of the United States air force interceptor squadrons which are on those leased bases. Is that clear?

Mr. WINCH: Would the minister, then, tell us what are the negotiations now which we were told about in the House of Commons today—or, we were told about the other day? Is that the only matter under negotiation now, as to whether or not we should have them there?

Mr. PEARKE: That is the only matter on which there is the exchange of notes going on.

But, as the Prime Minister said on January 18—I have it here: he made this statement in the House:

While I have carefully explained the views of the government on previous occasions, concern has been expressed regarding nuclear weapons in respect to which negotiations are still under way with the United States. Canada's stand might be summarized in this way: Eventually Canadian forces may require certain nuclear weapons if Canadian forces are to be kept effective.

Then he goes on and gives the example of the Bomarc anti-aircraft missile. Then, a little later, he refers to a system of control, how nuclear weapons, according to United States law, are retained under the control of the United States. He says:

—if obtained,—

That is the nuclear weapons:

they will be obtained from the United States. This is the principle upon which we are taking our stand. We cannot change the principle of United States ownership—they have taken a firm stand in this regard—but there shall be Canadian control of use in Canada.

Then later the same day, in answer to a question by Mr. Pearson, on page 73 he went on to say:

In these circumstances negotiations are proceeding with the United States in order that the necessary weapons can be made available for Canadian defence units if and when they are required. I cannot comment in detail on these negotiations but I wish to state that arrangements for the safeguarding and security of all such weapons in Canada will be subject to Canadian approval and consent.

I want to make it abundantly clear that nuclear weapons will not be used by the Canadian forces except as the Canadian government decides and in the manner approved by the Canadian government. Canada retains its full freedom of choice and decision. Furthermore, in order to ensure that any agreement entered into is kept up to date, it will be made subject to review at any time at the request of either government.

The CHAIRMAN: Does that satisfy you, Mr. Winch?

Mr. WINCH: No, not at the moment. May I ask, through you, Mr. Chairman, to the minister—I think this is a most important matter—in view of the statement made here and in the House of Commons by both the minister and the Prime Minister, if negotiations—which I understood from the answer today by the Prime Minister in the House of Commons, are still going on but are not completed, as to whether or not they include the use or the storage of nuclear warheads on Bomarc in Canada—because that is part of the same question?

Is that also being reviewed?

Mr. PEARKES: No, the negotiations have not reached the stage of the exchange of notes. There have been preliminary discussions, as indicated by what I read out from the Prime Minister's statement, which negotiations are still under way with the United States.

Canada's stand might be summarized in this way. Eventually Canadian forces may require certain nuclear weapons, if Canadian forces are to be kept effective. For example, the Bomarc anti-aircraft missile, to be effective, would require nuclear warheads.

Mr. WINCH: That is the very point. Can the minister now, in view of what he has just read out, tell us whether in the negotiations—as far as they have gone so far—is it on the Bomarc, or just on conventional warheads?

Are you now discussing with the United States the placing of nuclear warheads in Canada for use on the Bomarc? Is that what I understand from that?

Mr. PEARKES: There are preliminary discussions regarding that at the official level.

Mr. HELLYER: Mr. Minister, are these the same?

Mr. SMITH (*Calgary South*): On a point of order, Mr. Chairman: I think, because of the very reasonable nature of our colleague who has been asking these questions of the minister, and in view of his statement, that possibly a farce has been made of the committee, perhaps we should be absolutely certain that he is satisfied with the answer—certainly not to withdraw; but so it is not suggested that any farce has been made of the committee. There is some importance to this point of order.

Mr. PEARKES: If I may say this, Mr. Chairman: I think the rather longer statements I have made today in answer to these questions are absolutely in keeping with the statement I made at the last meeting, as is shown on page 312.

The CHAIRMAN: That is why I let you go ahead, Mr. Winch. I felt we should get this cleared up. I understood it, and I thought you did.

Mr. WINCH: I have been asked by Mr. Smith if I would withdraw that it is a farce to this committee. I still maintain this, and personally I do not like the situation. As a matter of fact, I like it very little.

The CHAIRMAN: You mean the discussion, the confusion, or what?

Mr. WINCH: This is now our fourteenth meeting, and personally I do not think we are getting very far. I am finding more information from the press than I can get from any information given in this committee; and I was very disturbed when I read in the papers of these negotiations as to whether or not there would be any nuclear warheads of any kind in Canada, because it was very definitely my understanding previously, from the statement of the minister and the Prime Minister—

The CHAIRMAN: That there were not any nuclear warheads here?

Mr. WINCH: Nor that there would be any here. But according to what I read in the press now, negotiations are under way to have them placed in Canada. So on that basis I think this committee is entitled to receive from the minister, as far as he possibly can, the most straightforward statement he can make as to what are the negotiations; how long they have been going on, and when will there be any decision.

I hope that before we have to report to the House of Commons we will have this information.

Mr. PEARKES: You will recall that as far back as February 20, 1959, reference was made to this, in which the Prime Minister, referring to NORAD arrangements, said:

With respect to decisions as to procedures concerning custody and control of nuclear warheads for use by Canadian forces operating under

the supreme allied commander in Europe and the supreme allied commander in the north Atlantic ocean, those decisions will be subject to negotiation with the appropriate NATO partners concerned and with those commanders.

Mr. WINCH: What was the date of that?

Mr. PEARKES: February 20, 1959; page 1224 of *Hansard*.

Mr. WINCH: That is fine; that is my very point, Mr. Chairman. I knew about that; and now, only today, in the House of Commons we are told that the negotiations are still proceeding. I think that this committee is entitled—

Mr. PEARKES: I beg your pardon, because you were told on January 18 of this year that they were going on.

Mr. WINCH: That is right; and we were also told some 16 months ago that the negotiations were still going on.

I think this committee now, after 16 months—and that is according to what was read out and what we have heard since; and now up until today negotiations are still going on. I think this committee is now entitled to know why it has taken over 16 months—18 months of negotiation, and what is the basis of the minister's and the government's position on nuclear warheads in Canada?

Mr. SMITH (*Calgary South*): Mr. Chairman, surely there is a point here. I should like to suggest this: the member, of course, has every right to question on the fact that a delay may have taken place; but this was not his point. He was talking about inconsistencies in statements. Quite obviously, unless he can quote them to us, there are no inconsistencies.

Does he suggest that the committee has been made a farce of, because of these inconsistencies? I would ask him if he can be definite about such a charge, and I would suggest that if we have not been able to obtain information, perhaps it is because of the inability of members to obtain information, rather than getting it from the witnesses.

The CHAIRMAN: Mr. Winch, I was going to say that at no time—and I have a fairly good memory—do I recall the minister ever having said anything but this to this committee: all he said to us in this committee was that there were no nuclear warheads stored in Canada. He made that statement several times, and he is making it again today. Today we learn that negotiations have commenced, or are continuing.

Mr. WINCH: They commenced 18 months ago.

The CHAIRMAN: But this was never denied here.

Mr. WINCH: I am asking if this committee cannot, now, after 18 months—

Mr. CHAMBERS: Sixteen.

Mr. WINCH: —have something more definite as to—

The CHAIRMAN: I think you have had a definite statement. If you read the evidence of today, the minister stated that the negotiations on this particular matter will include the possibility of arming Bomarc. What other information do you want, Mr. Winch?

Mr. WINCH: I think that the government is stalling on this question.

The CHAIRMAN: I do not.

Mr. WINCH: Well, I do. I think the government is stalling on this question of arrangements with the United States, and I should like to have a direct statement from the minister, after 18 months. All he has said is that there has been negotiation. When does he expect there will be an answer—especially in view of the information which was given in the house today, that an arrangement is being arrived at for the placing of nuclear warheads in Canada under the control of the United States.



The CHAIRMAN: You feel that you want to know when the negotiations will be completed and when there is a decision one way or the other?

Mr. WINCH: That is right.

The CHAIRMAN: I do not see how the minister can possibly say that.

Mr. PEARKES: I stated on Friday—and here are my words—“these negotiations are not complete”. They are not complete: there is no finality yet.

Mr. WINCH: You will agree, Mr. Minister, that you have been in negotiation for 18 months, according to what you have said?

Mr. PEARKES: I agree that negotiations have been going on, as stated by the Prime Minister on February 20. He said negotiations were going on. But remember that we have not got weapons in this country at the present time which can fire these nuclear warheads.

Mr. WINCH: Then may I ask the minister, Mr. Chairman, if he denies the reports in the press which have been carried across Canada today, that negotiations are proceeding for the location of nuclear warheads in Canada? Is that correct, or not—because my understanding is that the Canadian government does not want nuclear warheads in Canada?

Mr. PEARKES: The Prime Minister has stated several times—right back as far as 1959—that these weapons which we are getting—such as the Bomarc—will not have their full effectiveness if they do not have nuclear warheads. And he has repeatedly said, time and time again, that negotiations are going on regarding these.

The negotiations have not been pressed very urgently, because we have no Bomarcs yet: we do not expect to get the Bomarcs until 1961.

Mr. HELLYER: Mr. Chairman, I would like to continue in pursuit of this matter in respect of the inconsistency in the outline in respect to the atomic policy of the Canadian government. As the minister just said, as far back as February 20, 1959, the Prime Minister stated in the House of Commons:

The full potential of these defensive weapons is achieved only when they are armed with nuclear warheads. The government is, therefore, examining with the United States government questions connected with the acquisition of nuclear warheads for Bomarc and other defensive weapons for use by the Canadian forces in Canada, and the storage of warheads in Canada. Problems connected with the arming of the Canadian brigade in Europe with short range nuclear weapons for NATO's defence tasks are also being studied.

I have two direct questions in respect to this subject, Mr. Chairman.

Notwithstanding the Prime Minister's statement that the full potential of these defensive weapons is achieved only when they are armed with nuclear warheads, we have never been told categorically yes or no whether it was the policy of the Canadian government to so arm them when they were installed with the Canadian forces. I think it is only fair to ask that the minister tell us whether it is the intention of the Department of National Defence to arm the Canadian forces weapons with nuclear warheads, or whether it is not.

The CHAIRMAN: Do you expect the minister to answer that question before negotiations are completed?

Mr. HELLYER: Yes.

The CHAIRMAN: Why?

Mr. WINCH: I do too.

The CHAIRMAN: How could the minister answer that question?

Mr. HELLYER: Let me put it in another way. Mr. Chairman, I expect he can answer this question if we are going to have carriers which are only effective—

The CHAIRMAN: These weapons are not fully effective, that was the way it was put.

Mr. HELLYER: "The full potential—", yes.

The CHAIRMAN: I do not see how you can expect the minister to give you an answer to that question before they have received all the information. Before they have all this information it would be impossible for him to answer.

Mr. HELLYER: I wonder if the minister would like to comment on the second question I have in this regard? The Prime Minister said:

Problems connected with the arming of the Canadian brigade in Europe—

The CHAIRMAN: Where are you quoting from, Mr. Hellyer?

Mr. HELLYER: I am quoting from the February 20 *Hansard*, 1959, at page 1223.

The Prime Minister said:

Problems connected with the arming of the Canadian brigade in Europe with short range nuclear weapons for NATO's defence tasks are also being studied.

I would like the minister to tell us what the nature of those problems is and whether they have yet been solved.

Mr. WINCH: I am not quoting; but speaking from memory, the minister said that 18 months ago negotiations were entered into relating to the use of nuclear warheads. At this meeting or some future meeting we will be considering each item in this department's estimates?

The CHAIRMAN: That is right.

Mr. WINCH: I think it would follow Mr. Hellyer's question if I asked the minister to tell us why, when 18 months ago negotiations were started, there is still no answer. How are we going to vote on these items? We are going to be required to vote in a day or two on these estimates.

The CHAIRMAN: Mr. Winch, do you know that there is any estimate of money provided for nuclear warheads?

Mr. WINCH: No, sir, but there is—

The CHAIRMAN: I think we should defer this discussion until the time we find that there is a vote in this respect.

Mr. WINCH: No, sir. There is money estimated for our entire expenditure amounting to almost one and one quarter billion dollars, which is to include everything.

The CHAIRMAN: When we start consideration of these items one by one we will find out whether there is any money in respect of nuclear warheads.

Mr. PEARKES: I can answer that question right now. There is no money included in this year's estimates for nuclear warheads.

Mr. HELLYER: There are weapons being supplied which only reach their full potential if armed with nuclear warheads, is that correct?

The CHAIRMAN: That is right, and when we reach our consideration of the estimates—

Mr. HELLYER: Would you let the minister answer the question? I do not doubt your intelligence at all, but I would like to have the answer come from the minister.

The CHAIRMAN: All I wanted to tell you, Mr. Hellyer, is that if there is no money included in the 1960-61 estimates, then we are not going to ask the minister any questions about that at all.

Mr. HELLYER: Mr. Chairman, on a point of order. That is completely wrong.

The CHAIRMAN: We are concerned with the estimates for 1960-61.

Mr. HELLYER: We are being asked to vote moneys for weapons which everyone knows, according to expert evidence given in other places, can only be utilized effectively with atomic warheads. We are voting Canadian funds for this. Surely we have the right to be told by the Minister of National Defence and by the government of our country whether or not in fact nuclear warheads are going to be installed in these carriers.

Mr. WINCH: And on Bomarc's.

Mr. HELLYER: How else will we know what we are paying?

The CHAIRMAN: As the minister has said, the Bomarc's if they are going to be made fully effective will have to be equipped with nuclear warheads.

Mr. HELLYER: That is right.

Mr. WINCH: That is the very point I was after. I think this question should be cleared up before we reach an item by item consideration.

The CHAIRMAN: Have you any further comment that you would like to make in this regard, Mr. Minister?

Mr. WINCH: For 18 months you have been in discussions as to whether or not there is going to be anything done in the way of nuclear warheads in respect of Canada, or in respect of our armed forces overseas. After 18 months and right up until today in the House of Commons we are still being told that negotiations are going on. I think this committee is entitled to receive a very straightforward statement from the minister as to the situation, and an explanation as to how this ties in with the estimates which we will be discussing in a very few days.

Mr. CHAMBERS: Does Mr. Winch suggest that a matter of this importance should be cleared up in two days?

Mr. HELLYER: Two days after 18 months.

The CHAIRMAN: Gentlemen, in all fairness I do not know how you could expect to get an answer to that question. We are considering the estimates for 1960-61. If there is not any money included in those estimates for nuclear warheads, in all fairness, I do not see how we can ask questions about this.

Mr. WINCH: In all fairness, Mr. Chairman, and I think I am very fair, we have been told in the House of Commons time after time, and we have been told in this committee time after time by the minister certain things in relation to atomic warheads. Now, for heavens sake, surely we are entitled as members of this committee to have some understanding as to what is the position or relationship of atomic warheads in respect of our armed forces. Why, after 18 months, is there no decision? Why—this I want to stress because it is my understanding from all I have heard from the Minister of National Defence, and from the Prime Minister that this government does not favour the storage of atomic warheads in Canada at all—does the minister not know what the government's policy is even after 18 months of negotiation?

Mr. SMITH (*Calgary South*): I wonder if, in respect to this point, we could be informed of the source of Mr. Winch's information?

Mr. WINCH: I received this information in the House of Commons.

Mr. SMITH (*Calgary South*): In whose statement was this information given?

Mr. PEARKES: I do not see how I can go any further than the statement made by the Prime Minister on January 18 when he said that eventually the Canadian forces will require certain nuclear weapons, if the Canadian forces are to be kept effective. This will be done by placing the nuclear warheads in the Bomarc's, into the aircraft missiles. To be effective eventually the Canadian forces will have to be equipped with nuclear warheads.



The Bomarc is not available yet. The Bomarc will not be made available during this fiscal year. What is the great rush to get these negotiations settled? I can assure you that—

Mr. WINCH: We want to know what your defence policy is.

Mr. PEARKES: There are a great many problems in connection with any nuclear warhead, and surely you do not want to get things finalized so far ahead of the need.

Mr. SMITH (*Calgary South*): May I ask a question of the minister, Mr. Chairman?

The CHAIRMAN: Go ahead, Mr. Smith.

Mr. SMITH (*Calgary South*): You have stated, sir—I quote from the Prime Minister's statement—

The full potential of these defensive weapons is achieved only when they are armed with nuclear warheads.

My question is sir; the full effectiveness of these weapons will require nuclear warheads. Is your answer to that question "yes"?

Mr. PEARKES: These weapons can be used either with a nuclear warhead or an ordinary high explosive warhead. On certain types of targets you would get greater results by employing nuclear warheads. There are other types of targets in respect of which it is considered it would not be necessary to use nuclear warheads.

Mr. SMITH (*Calgary South*): Thank you, sir.

My second question is; you are continuing negotiations for nuclear warheads in respect of certain weapons, but in the case of the Bomarc we have not yet received the weapons with which the warhead would be used; is that also correct?

Mr. PEARKES: We have not received the Bomarcs yet. There are discussions going on regarding the type of warheads which can be used; the type of storage that is required, and that sort of thing, at the official level. We are receiving all the information that we can before the time arrives when we shall actually require them. As was indicated by the Prime Minister, we may require them but it is a matter of preparing the notes, between the two countries.

Mr. SMITH (*Calgary South*): May I stop you at that point?

I will ask you my third question now, so as to keep this in sequence. Have you at any time, or has any member of the government to your knowledge indicated that you do not want these nuclear warheads?

Mr. PEARKES: Not to my knowledge.

Mr. WINCH: You have—when I say "you"—

The CHAIRMAN: Mr. Winch, when you are finished with this question I am going to ask you to refrain from asking this type of question until we reach our consideration of the individual items. I am going to allow you to ask this question now but I suggest that we withhold any further questions in respect of the Bomarc until we are considering the estimates item by item.

Mr. WINCH: I would like to ask this question in respect of the Bomarc in view of what has been said.

When the Bomarc was ordered, were they so ordered without any knowledge as to whether they were going to have conventional or nuclear warheads?

Mr. PEARKES: As I said, the Bomarc can be used with either the conventional or nuclear warhead.

Mr. WINCH: But when the Bomarcs were ordered by the government, were they intended to be used with the conventional or the nuclear type warhead, or both?

Mr. PEARKES: When the Bomarc was ordered by Canada and when the statement was made by the Prime Minister on February 20, 1959, it was made quite clear then that the Bomarc could use nuclear warheads.

The CHAIRMAN: Now, Mr. Winch, I am going to ask you to leave that subject.

Mr. WINCH: May I ask just one further question?

Was it your understanding, therefore, when the contract was given, or issued, that the Bomarcs would perhaps use nuclear warheads? What was the understanding?

Mr. PEARKES: No actual contract has been issued yet. There has been no contract made. It is my understanding that if the Bomarc is used in Canada, in order to achieve its full potential, as the Prime Minister has stated, it should have a nuclear warhead.

The CHAIRMAN: All right, gentlemen, let us leave this subject until we reach that item.

Are there any further questions in regard to NATO?

Mr. HELLYER: I have a list of questions which I started.

The CHAIRMAN: Are these questions in respect of NATO?

Mr. HELLYER: Yes. These have to do with the same subject I was discussing earlier. I asked a question in respect to the problems involved in working out agreements for the use of short range nuclear weapons for NATO. May I repeat the question to the minister? I would like to know the nature of these problems and whether they have as yet been solved.

The CHAIRMAN: Would you like to repeat your question, Mr. Hellyer?

Mr. HELLYER: Yes. The question was based on the Prime Minister's statement as recorded in *Hansard* on February 20, 1959, where he said:

Problems connected with the arming of the Canadian brigade in Europe with short range nuclear weapons for NATO's defence tasks are also being studied.

I am wondering what those problems are and whether they have as yet been solved.

Mr. PEARKES: There will be problems regarding the storage of these nuclear weapons, where they are to be stored, how they are to be stored and who will be responsible for the storage, and that sort of thing.

Mr. WINCH: Could I ask a question on the same subject?

The CHAIRMAN: Yes.

Mr. WINCH: Last Friday you will remember, Mr. Minister, that I asked for certain information in respect of weapons, and I received a complete file of all the weapons that the Canadian forces in NATO have, and all the weapons which they expected to receive. This list covered three pages. Included in this list there was not one weapon that was capable of firing a nuclear warhead. How do you tie that in with the answer in which you have just given to Mr. Hellyer?

Mr. PEARKES: Because, to the best of my knowledge, none of the weapons with which the brigade is armed has the capability of firing nuclear warheads.

Mr. WINCH: Are you telling me that in that list which you gave me—

The CHAIRMAN: This list will be found on page 317 of the minutes of this committee.

Mr. WINCH: Are you saying that there is included in this list of weapons some that are capable of firing a nuclear warhead?

Mr. PEARKES: They are not capable of that. None of the weapons that the brigade have today, to the best of my knowledge, is capable of firing a nuclear warhead.

Mr. WINCH: How do you then explain the answer which you gave to Mr. Hellyer?

Mr. PEARKES: We are acquiring the Honest John, which is a ground to ground weapon and which, when we receive it, will be capable of firing a nuclear warhead. When we receive it next year it will be capable of doing so. We are training some of our staff and some of our personnel in the uses of that weapon now. The problem in respect of storage and so forth should be solved before we receive this weapon.

Mr. WINCH: Where do we find that in the estimates item for this new equipment, for the brigade in NATO, in Europe?

Mr. PEARKES: Actually, there is no cash in this year's estimate for the Honest John. It will come in the following year. But we have indicated the intention to acquire the Honest John as soon as it becomes available.

Mr. WINCH: That will be in 1962, then?

Mr. PEARKES: It will be in the estimates for 1961-62.

Mr. HELLYER: On July 2, 1959, at page 5393 of *Hansard*, the minister is quoted as having said this:

The hon. member for Vancouver East spoke about nuclear power and rather suggested that Canada should not employ nuclear weapons. Of course it is government policy that Canadian troops should be armed as efficiently and as effectively as are troops with which they are cooperating. I do not think the average Canadian would wish to see his country's troops sent into action inferiorly equipped.

Is it fair to take from that, Mr. Minister, the inference that Canadian troops in Europe would be armed with the atomic weapons?

Mr. PEARKES: I do not know how many times I can repeat it. I said we have the Honest John on order. We have the 104 aircraft on order. Both of those are capable of using nuclear weapons.

Mr. HELLYER: You have almost satisfied us, Mr. Minister. All you have to do is to say it is the policy of this government that both of those weapons will be equipped with nuclear weapons, or they will not be; and then we will be satisfied in this respect.

The CHAIRMAN: Bring that up next year, when we are checking the 1961-62 estimates, by all means. We are not spending money on it now.

Mr. HELLYER: If you were asked to buy furniture for no house to put it in, surely you would want to raise a point on it?

The CHAIRMAN: We are not buying furniture.

Mr. HELLYER: No, we are not buying furniture, but we are buying vehicles, and we want to know the weapons they are capable of using.

The CHAIRMAN: The minister has answered that.

Mr. HELLYER: There is the Bomarc missile and the 104, and you are training troops at the taxpayers' expense to learn how to fire guided missiles that are capable of carrying atomic weapons.

Mr. PEARKES: That is perfectly clear, I think, from what the Prime Minister said:

Eventually Canadian forces may require certain nuclear weapons, if Canadian forces are to be kept effective.

Mr. HELLYER: "May," "if" and "when"—these are the words we object to.

Mr. PEARKES: Do you not realize that at the present time there are disarmament conferences going on in Geneva; and one of the proposals which have been made is that nuclear weapons should be one of the first type of weapons not to be used? We do not know whether those proposals are going



through or not. I am not going to come out and say today, that in spite of the disarmament conferences we are going to use nuclear weapons. I cannot make a statement like that. But, surely, we are going ahead and making preparations in case those disarmament conferences are not successful. If those disarmament conferences are not successful, then we may, as the Prime Minister said, require these weapons to be used by Canadian forces.

Mr. WINCH: The important thing for me is not the word "may," but in view of what the minister has just said, it is your opinion now, sir, that our Canadian troops overseas have to be equipped with atomic weapons and nuclear warheads. Therefore, any possibility of conventional war is outside your realm now, and you may immediately go into a nuclear war. That is the reason you say now you are going to equip them with nuclear weapons?

Mr. PEARKES: I said, as the Prime Minister said—and I repeat again and again—these forces "may" require them. The Prime Minister has not come out and said they "will" be equipped with these. The situation is fluid at the present time, and it would be most unwise, when disarmament talks are going on, for Canada—to use the old adage—"to rattle the sabre," by declaring that, "Come hell and high water, we are going to use nuclear weapons."

Mr. HELLYER: Mr. Chairman, it seems to me, for some reason, I am not permitted to—

Mr. PEARKES: May I read another quotation? This was on January 18. I have already referred to it:

In those circumstances negotiations are proceeding with the United States in order that the necessary weapons can be made available for Canadian defence units, if and when they are required.

We are taking all the necessary precautions to have everything ready, so that if the time comes that they are required to be used, then the machinery will be there to equip our forces with these weapons.

Mr. HELLYER: The minister has said it would be unwise to show his hand now, as to whether we intended to use atomic weapons or not. Does he not agree it would be unwise to purchase these vehicles if it was not the intention of the government to use these weapons, assuming there is no disarmament agreement reached at any time.

Mr. PEARKES: No, I do not think it would be wise for us to abandon the purchase of these things at present.

Mr. HELLYER: It would not be wise?

Mr. PEARKES: No, that is my opinion.

Mr. HELLYER: Would it be wise to purchase them?

Mr. PEARKES: We have made arrangements, and we are going ahead; and there is nothing, at the present time, to justify abandoning the plans we have started.

Mr. SMITH (*Calgary South*): You believe in a state of preparedness.

Mr. WINCH: Could I ask one question? I say it now, because I think it my right. This is my country, and this is always going to be my country too. But I cannot quite understand—

Mr. CHAMBERS: Your proprietary air does not do us credit.

Mr. WINCH: This is my country, and I cannot understand the use of the words "if," "why," and "may." This is our fourteenth meeting, Mr. Chairman, and if "why," "when" and "may" are the terms we get from the minister on asking him questions—well! I would like to ask the minister—and I think I am saying it as a real, patriotic Canadian—can we not get away from that and say that we have a definite "shall" and "will" instead of "if," "why" and "may"?

Mr. PEARKES: I cannot go that far.

Mr. FAIRFIELD: Many of these questions are hypothetical.

Mr. WINCH: It is not hypothetical, and to me this is the most damned important thing of all. That is why there is so much disturbance in the House of Commons and amongst the public, because of a defence policy which is based on "if," "why" and "may."

Mr. PEARKES: If defence was just black and white, it would be so easy. But it is not black and white. There are so many shades of grey between black and white.

Mr. HELLYER: If I may continue with my black and white, this is another quotation from Hansard of July 3, 1959, at page 5414. The Minister of National Defence is quoted as saying:

Now, regarding the position of the supply of nuclear weapons, it was stated by the Prime Minister in the House on February 20 that problems connected with arming the Canadian brigade in Europe with short range nuclear weapons for NATO defence tasks are also being studied. These studies are continuing and are fast reaching the stage when there can be an exchange of notes on this matter.

That was on July 3, 1959. Would the minister explain, if he realized at that time that it would be so long before there could be an exchange of notes, what he means by "fast," and just how soon now he thinks an exchange of notes is possible?

Mr. PEARKES: I think, if you look back over the events between January 20, 1959, and now you will see that I thought it would be possible to finalize this matter earlier than it has been possible. For instance, at that time we believed that the Lacrosse would be the weapon which would be adopted by the Canadian brigade. As circumstances have turned out, the Lacrosse has not developed along the lines it was expected to develop. This weapon was being developed in the United States, and not by us, and the change in the general plans for the employment of the Lacrosse weapon was brought in.

Mr. HELLYER: We appreciate the change in general plans, and there have been many, and undoubtedly will be more; but what we are concerned about is the continuing delay in finalizing a policy on this matter by the present government, and there has been—just as Mr. Winch said—a complete confusion in respect of this subject and a number of conflicting statements.

On July 22, 1959—and this is a quotation from a C.B.C. interview he gave just before departing for London, Mr. Pearkes said:

The problem (of supplying Canadian air squadrons in France) will arise when our squadrons are re-equipped with the F-104G's, and then armed with nuclear weapons.

Was that a correct quotation?

Mr. PEARKES: I could not remember.

The CHAIRMAN: What date was that again?

Mr. HELLYER: July 22, 1959, and the quotation was:

The problem (of supplying Canadian air squadrons in France) will arise when our squadrons are re-equipped with the F-104G's, and then armed with nuclear weapons.

Mr. PEARKES: There are lots of problems which will arise, if and when they are armed with the nuclear weapons.

Mr. HELLYER: Mr. Chairman, I think the problem has arisen and is continuing. It is simple to say that it would be unwise. In fact, it would be foolhardy for the Canadian government to continue to spend taxpayers' money on weapons systems designed primarily for use with atomic warheads, unless a decision has been taken positively to use them in those systems. I think

and we think it is a reasonable position to take that we should not be asked to vote public funds for these several weapons systems until we are given an assurance the government policy is arrived at.

We would urge the minister to tell us now, if he knows—and if he does not know, to ask his cabinet colleagues to come to a firm decision on this matter, as to whether or not these weapons will be or will not be armed with nuclear warheads.

The CHAIRMAN: The minister has answered that about four times.

Mr. HELLYER: On no occasion has he said they would or would not be; but it has always been, "maybe" or "if" or "when."

Mr. WINCH: I think perhaps this question might bring this thing to a head. Could I ask, through you Mr. Chairman, to the Minister—

The CHAIRMAN: Yes, Mr. Winch?

Mr. WINCH: —on this matter which I have spoken about, which I think is of importance: is it his responsibility, as minister, to negotiate with the United States on this matter of nuclear warheads; or does that come under External Affairs?

Mr. PEARKES: The final negotiations and exchange of notes comes under External Affairs.

Mr. WINCH: I would like, therefore, to make the suggestion—and if I can get a seconder, I will so move—that the Secretary of State for External Affairs be called before this committee to give us all the possible information on the state of negotiations between Canada and the United States on the use of, or the storing of nuclear warheads. I would like to move that now.

Mr. HELLYER: Mr. Chairman, under the circumstances, I would agree to second that.

The CHAIRMAN: Any comment, gentlemen?

Mr. CHAMBERS: I am very glad that we have had a clear statement from Mr. Winch, representing the C.C.F., and Mr. Hellyer, representing the Liberals, that they are anxious the Canadian government should immediately declare they are using atomic weapons. I think it is very edifying.

Mr. HELLYER: I think it is important Canada should have a policy, and this government should be honest enough to tell the people where they stand.

Mr. PEARKES: The government is perfectly honest, but it is not going ahead and making a firm and rigid policy. It cannot go any further than what the Prime Minister said on the 18th.

In those circumstances negotiations are proceedings with the United States in order that the necessary weapons can be made available for Canadian defence units, if and when they are required.

Those arrangements are going ahead. They have not got to the stage of the final exchange of notes regarding these weapons, except in the case of the storage of the nuclear warheads, at Goose Bay and Harmon Field, on the leased bases, as the Prime Minister stated today. But still discussions and talks are going on, and all the material is being arranged so that when we are ready with these weapons, when these weapons are available, it will be a simple matter to complete the notes, so that they will be available, if and when required. I do not think anybody can go any further than that.

The Secretary of State for External Affairs can only say exactly the same thing as I have said, that there are negotiations, notes being exchanged regarding the storage of the weapons at Goose Bay and Harmon Field, on those leased bases. But we have not got to the stage of exchanging notes regarding any other of the nuclear weapons. However, talks have been going on between officials and ministers on the matter.



Mr. WINCH: I thought I was very fair in asking questions before I moved that motion. It was my understanding from the questions I asked and the answers received from the minister, that for 18 months this matter had been under discussion.

Mr. PEARKES: Yes, under discussion.

Mr. WINCH: It was very definitely understood from the Prime Minister today that negotiations are still going on. I was very careful, Mr. Chairman, in asking through you, to the minister, whether or not it was his responsibility or the responsibility of the Secretary of State for External Affairs. The minister said it was the responsibility of the Secretary of State for External Affairs. In view of the job given to this committee and the answers given now, I think it is of the utmost importance that we know officially what has gone on these past 18 months, and what is now the position of the discussions between the United States and Canada.

The CHAIRMAN: Your motion, as I understand it, is that the Secretary of State for External Affairs be called before this committee re the negotiations between Canada and the United States on nuclear warheads, weapons—is that it?

Mr. WINCH: In all its aspects.

The CHAIRMAN: Is that your motion?

Mr. WINCH: As long as that means in Canada, and their use.

Mr. MACDONALD (*Kings*): Mr. Chairman, I cannot see any purpose or necessity for such a motion, since these weapons can be used either with conventional or nuclear warheads. There has been no definite statement nuclear warheads are going to be used, so there is no purpose at all in calling in the people from external affairs who might be involved.

Mr. WINCH: Have you read the papers?

Mr. CHAMBERS: I will be very surprised if the Secretary of State for External Affairs could or would talk in committee about private negotiations that are going on with another country. At the same time, I think we should be fair to Mr. Winch, and, for that reason, I suggest this motion be referred to the steering committee for consideration.

Mr. SMITH (*Calgary South*): I would like to support that, for this reason, that we have followed a practice I know Mr. Winch has concurred in, that all witnesses be referred to the steering committee, with a view to the steering committee examining the purpose and importance of their being called, then to report back to the committee. I would subscribe to Mr. Chambers' amendment.

The CHAIRMAN: Is that agreeable?

Mr. WINCH: There is no inconsistency whatever. When it came to a discussion in our committee a few minutes ago as to whether or not our reference involved Defence Production, right in this committee it was stated Defence Production, yes, was a concern; and we could call on them. We have now had something else which is completely under our purview but concerns also external affairs. So when it came to a matter of Defence Production, that was not referred back to the steering committee, but it was decided right here and now it was within our purview.

The CHAIRMAN: This is the orders of reference. Expense:

Ordered—that items numbered 217 to 237 inclusive, as listed in the main estimates of 1960-61, relating the Department of National Defence, be withdrawn from the committee of supply and referred to the special committee on defence expenditures,—

Then they go along and say:

Ordered,—that items numbered 66 to 74 inclusive, as listed in the main estimates of 1960-61, relating to the Department of Defence Production, be withdrawn from the committee of supply and referred to the special committee on defence expenditures,—

That is right in the orders of reference.

Mr. PEARKES: Might I read one more? The next sentence which the Prime Minister said on January 18, after referring to the fact that:

—the necessary weapons can be made available for Canadian defence units if and when they are required—

I cannot comment in detail on these negotiations.

I do not see how anybody can give detailed information regarding these negotiations which have not been completed.

Mr. WINCH: As far as I am concerned, I think there is a stall on negotiations until this committee is through—as regards negotiations with the United States—and as a member of this committee I want a report from those who are responsible for the negotiations over 18 months on nuclear weapons or storage. I think this committee is entitled to receive the information. I know the minister has answered every question, to my knowledge, that has been asked of him. When I asked him questions as to who was responsible for this particular matter, he said the Secretary of State for External Affairs. So I maintain we are entitled to hear from the Secretary of State for External Affairs. I think it is mighty important we get full information in this committee as to the state of the negotiations and where they stand after 18 months, and what is the hold up. That is why I asked this motion be now presented.

Mr. CHAMBERS: Perhaps it would be useful if I moved the amendment, adding the words:

If recommended by the steering committee.

I would like to so move.

The CHAIRMAN: Have you a seconder?

Mr. SMITH (*Calgary South*): I second that.

The CHAIRMAN: The amendment would read—

Mr. HELLYER: Before we take that, the minister indicated that if the Secretary of State for External Affairs came here all he could do is reiterate what we have been told today, which is, in effect, that the government has no policy and it does not want to come to a decision.

Mr. PEARKES: I never said the government had no clear policy. We have a clear policy.

Mr. HELLYER: As far as we are concerned, if the minister is willing to undertake to find out what the policy is for us and have the government come to a decision and announce it, either in the House or in this committee, there would be no need to have the Secretary of State for External Affairs come here. But we think we should have an accounting of the amount of diligence with which the negotiations have been pursued, and when the minister or the Secretary of State for External Affairs thinks some conclusion will be reached.

I think it could be demonstrated to the complete satisfaction of anyone on the committee that some, at least, of the proposed weapons are absolutely useless without atomic warheads. And, although they are said to have a capacity, with ordinary high explosive, that is, fundamentally, just nonsense.

The CHAIRMAN: Are you talking about the amendment?

Mr. HELLYER: Yes—and, for this reason, and the importance of the whole expenditure involved, we feel that the matter should be cleared up.

Mr. SMITH (*Calgary South*): He is becoming an authority, overnight, on nuclear weapons.

Mr. PEARKES: I must protest the fact the member is continually saying there is no policy in this matter; it was clearly announced by the Prime Minister on January 18, and I have read it out at least a half a dozen times.

Mr. SMITH (*Calgary South*): But, he cannot understand it.

Mr. FAIRFIELD: Surely, as these negotiations are bilateral, no one would want to foul them up by calling one side only.

If Mr. Winch wants to be fair, he should also express his desire to call the minister from the other side—the United States, as well. I do not think the calling of one side of a bilateral negotiation is a proper procedure.

Mr. WINCH: I moved the original motion, Mr. Chairman, in all sincerity. Now, there has been an amendment moved. I want to see something factually done on this. If the mover of the amendment would include in that—

The CHAIRMAN: Provided it is recommended by the steering committee.

Mr. WINCH: Would the mover of the amendment include in it that the Secretary of State for External Affairs meet with the steering committee?

Mr. SMITH (*Calgary South*): I suggest, Mr. Chairman, that this is not unreasonable, in the sense that we can determine whether he has anything to add to the present discussion; however, whether or not it needs to be incorporated into the amendment, is another point.

Mr. WINCH: I would like to know if we can obtain information from him in the steering committee. Would you incorporate that?

Mr. CHAMBERS: I see nothing wrong if the Secretary of State for External Affairs wants to meet with the steering committee, but whether it would be in order to move, in effect, a motion calling him before the steering committee, is doubtful.

Mr. WINCH: I ask that he be invited to meet with the steering committee.

Mr. CHAMBERS: The steering committee has the power to call anyone.

The CHAIRMAN: It seems to me, gentlemen, that this is a little bit out of order. A motion, and an amendment to it, has been made, and you are attempting to destroy his amendment.

Mr. WINCH: No, I am not.

The CHAIRMAN: No, but that is what is happening. You are destroying his amendment by asking that he be present.

Mr. CHAMBERS: I would not entirely agree, but I think it is clear that the steering committee has full power, if it wants, in considering this motion, to speak to the Secretary of State for External Affairs.

I do not think the additional amendment which Mr. Winch has suggested is at all necessary. Any steering committee can do that.

The CHAIRMAN: I would agree with Mr. Chambers. I think it will be handled fairly. The amendment is purely your motion, with the following words: "Provided it is recommended by the steering committee".

Shall I put the question?

Mr. CARTER: Before you put the question, I would like the minister to clear up one point.

I can understand that negotiations are necessary with respect to Bomarc sites. However, I find it hard to understand why negotiations are necessary with regard to Harmon field and Goose Bay, because they were included in a lease made prior to confederation, which gives them power to do what they like with it. I would be surprised if the terms of the original lease did not give the United States that power already. Correct me, if I am wrong, Mr. Minister.



Mr. PEARKES: The original lease did not give the power to the United States to store nuclear weapons on these leased bases, for the simple reason that nuclear weapons had not been invented at that time and, whether it is necessary or not, the United States have referred this matter to Canada, and they are in the course of preparing notes dealing with these two bases.

Mr. CARTER: Would it be possible, Mr. Chairman, to have that document produced?

Mr. PEARKES: No, because it is not completed.

Mr. CARTER: The original lease.

Mr. CHAMBERS: Surely, that is External Affairs.

The CHAIRMAN: They are both public documents, as I understand it—both the Labrador and the Newfoundland one.

Are we ready for the question on the amendment?

Mr. CARTER: Is there any objection to that being produced at a subsequent meeting?

Mr. PEARKES: There is no objection to any member obtaining any public document.

The CHAIRMAN: Are we ready for the question on the amendment?

All those in favour of the amendment, please raise your hand.

The CLERK OF THE COMMITTEE: Five.

The CHAIRMAN: Contrary, if any?

The CLERK OF THE COMMITTEE: Four.

The CHAIRMAN: I declare the amendment—

Mr. WINCH: The motion as amended.

The CHAIRMAN: As amended.

Would you like to vote on the motion?

Mr. WINCH: As amended. I wanted it on the motion. I did not like that but, on the motion as amended, I will support it.

The CHAIRMAN: All those in favour of the motion as amended, please raise your right hand.

The CLERK OF THE COMMITTEE: Six.

Mr. WINCH: If I cannot get the whole cake, I will take half of it.

Mr. HELLYER: Mr. Chairman, there is a bit of irregularity which should be cleared up. Any recommendation of the steering committee has to come back for discussion by the committee at large. This is a well established rule. It is impossible for this committee to vote for a motion to amend it, and then delegate these powers to the steering committee. You appreciate that. The whole thing is out of order.

Mr. SMITH (*Calgary South*): You will find, then, that you are actually voting on Mr. Hellyer's motion, because there was no further amendment to the first amendment.

The CHAIRMAN: Let each one of us hire a lawyer; I think we need one.

Mr. HELLYER: Will you get the law clerk of the House of Commons to examine the irregularity of this.

Mr. SMITH (*Calgary South*): Have the secretary read back the two motions.

Mr. WINCH: I suggest we do not, and that we just go ahead.

Mr. HELLYER: These difficulties are similar to the ones which the minister has in getting his policy worked out.

The CHAIRMAN: Gentlemen, could we get back to NATO, and see if we can complete it today.

Are there any further questions on NATO?

Mr. SMITH (*Calgary South*): Sir, on page 13 of your report—

The CHAIRMAN: On what page of the evidence is that?

Mr. SMITH (*Calgary South*): I am not certain of the page in the evidence. In any event, it is page 13 of the minister's report on NATO. You need not refer to it, as I will read the only reference.

We already have dealt, to some extent at least, with the function of both the brigade and the air division, sir, but, in so far as the naval forces are concerned, which are part of SACLANT, I wonder if you could tell the committee whether or not there is any intended change in either their capacity, numbers, or in their role. It seems to have been fairly static whereas both the brigade and air division have seen a fairly definite change in their respective roles. We had, as an example, the brigade to build up the West German forces, and there has been a complete change in the role of the air division. Do you forecast any change in the role of the naval forces as a contributory part to SACLANT?

Mr. PEARKES: Our naval contribution to SACLANT consists of placing at the disposal of the commander in chief of SACLANT a specified number of vessels, should operations develop—should war occur. The role of these vessels is, essentially, that of detection, hunting and destruction of submarines.

Mr. SMITH (*Calgary South*): Then, the answer to my question is no; there is not intended or expected any change in their role.

Mr. PEARKES: No expected change.

Mr. SMITH (*Calgary South*): May I ask you this question then. In relation to the equipment which you have provided the Canadian naval forces, is there any intention by your department, or the government, to provide any additional or any improved equipment to SACLANT—to the naval forces?

Mr. PEARKES: We are improving the equipment continually. There is the variable depth sonar, and we are improving the wireless equipment. I think I can say there is constant review of the naval equipment—the equipment for the ships. We are improving it, as new inventions and new developments come along.

Mr. SMITH (*Calgary South*): I am concerned, as I am sure the Defence department officials are, that enemy submarines may have made considerable advances in the development of submarine warfare, and what I am making reference to is whether or not the type of St. Laurent class destroyer is considered, in its role in NATO, competent in dealing with submarine threats.

Mr. PEARKES: Yes. The St. Laurent class is considered an efficient surface vessel. Of course, the Restigouche class is an improvement over the St. Laurent. However, the St. Laurent class is considered an efficient naval vessel.

Mr. WINCH: Could I ask the minister a question concerning this discussion on NATO?

The CHAIRMAN: Proceed.

Mr. WINCH: We have, in Canada, two defence agreements; one is NORAD, and the other is NATO. I understand that under NATO, the commander of NATO controls our naval forces on the Atlantic coast. Is that correct?

Mr. PEARKES: There is an Atlantic commander working as a commander of NATO.

Mr. WINCH: That is the Royal Canadian Navy on the Atlantic coast. I put this question for one reason. Personally, I think it is completely wrong that we should think there is only one enemy. However, I hope we do not have war.

The question I would like to ask is this. What is the position of all your naval forces on the Pacific coast? Under whom are they commanded, because if my knowledge of geography is correct, the Siberian ports of the U.S.S.R. are closer to the Pacific coast than the Atlantic. Who commands on the Pacific coast?

The CHAIRMAN: Naval?

Mr. WINCH: Yes.

Mr. PEARKE: I want to get that correct.

Certain units of the Atlantic fleet come under the command of SACLANT—that is, the commander in chief Atlantic, on the outbreak of war. However, there are other vessels on the Atlantic which do not come under SACLANT commander. As far as the Pacific is concerned, none of the forces on the Pacific are assigned to the NATO command; they are under the command of a flag officer, Pacific coast, of the Royal Canadian Navy.

Mr. WINCH: Could I ask this important question then. What is the differentiation between the command of the navy on the Atlantic and on the Pacific? I gather from you now that, on the Atlantic, the Royal Canadian Navy, to a great extent, comes under the command of SACLANT—NATO. What is the position on the Pacific coast?

The CHAIRMAN: He just answered that.

Mr. WINCH: But not to my satisfaction.

What is the differentiation between the Atlantic command and the command on the Pacific?

Mr. PEARKE: As far as the flag officer, Royal Canadian Navy Atlantic, is concerned, he is commander of all the Canadian ships which are stationed on the Atlantic. He is also a subordinate commander of SACLANT. That is, there is a Canadian subsection of the Atlantic command of NATO. So that any ships, be they Canadian ships, American ships or British ships, which were operating in that sub-command of SACLANT, would come under the flag officer, Royal Canadian Navy. However, there are certain ships of the Atlantic fleet which are earmarked to come under the command of the commander in chief of the Atlantic area, at the outbreak of war. Now, the commander in chief of the Atlantic area may assign back all or some of those ships to the Canadian sub-command or, he may find in the best interests of the progression of the war, that they would have to go somewhere else.

As far as the Pacific is concerned, the North Atlantic Treaty Organization does not apply to the Pacific coast and the ships of the Royal Canadian Navy stationed in the Pacific are at the disposal of the Royal Canadian Navy or, at the disposal, shall I say, of the Canadian government. They are there for protection, primarily, of the west coast, but if the Canadian government decide they should be moved elsewhere—perhaps to support some operation in any part of the world which was being initiated, perhaps, by the United Nations—they are available for that. In other words, you might say, first of all, they are for the protection of the west coast and, secondly, they are a general reserve at the disposal of the Canadian government.

Mr. WINCH: That is the point I am trying to arrive at. If my understanding is correct, if you take the Siberian ports of the U.S.S.R.—and I hate to mention this—and Red China, they are as close, if not closer, to the Pacific ports as the U.S.S.R. is to the other side. What is the policy differentiation? Everybody is proceeding on the basis that if there is going to be a war it will be initiated from the U.S.S.R. The British Columbia coast is supposed to be closer to the U.S.S.R. than Halifax is. I would ask what the differential in policy is in respect to the North Atlantic Treaty Organization between the east coast and the west coast.



Mr. PEARKES: The North Atlantic Treaty Organization deals with the north Atlantic. As far as the Pacific ocean is concerned, you may say that it is part of the Canadian-U.S. region of the North Atlantic Treaty Organization, but those naval vessels are primarily for the defence of the west coast of Canada. They work in cooperation with the American fleets.

Mr. WINCH: Is our navy not on the Atlantic coast for the protection of Canada?

The CHAIRMAN: They come under two different commands. There is no NATO command for the Pacific coast.

Mr. SMITH (*Calgary South*): I am wondering Mr. Minister, if Canada's contributions to NATO over the past few years have remained fairly static, and I am speaking in respect of equipment rather than man power. Over the past few years has Canada's contributions to NATO in respect to equipment, including ships and aircraft, remained fairly constant?

Mr. PEARKES: There very definitely have been improvements. For instance, the Argus aircraft form part of the maritime command on the east coast. It is a tremendous advance having those two squadrons there.

Mr. SMITH (*Calgary South*): Is it fair to ask you whether or not the withdrawal of any force of a country contributing to NATO, such as France, has an effect on the Canadian contribution to NATO.

Mr. PEARKES: No. We have maintained our original commitments, as far as the number of ships and aircraft to support them are concerned.

Mr. SMITH (*Calgary South*): The point I am making, sir, is that we assume this is an alliance or partnership in which each country makes a contribution based on the total requirement. I think that is the right concept. If one country withdraws or, for the sake or argument, another country increases its strength, surely this affects the Canadian total contribution. I would cite as an example your statement yesterday that the brigade could conceivably be reduced by a build-up of West Germany's forces. Is there any relative comparison between Canada's contribution to NATO forces and the total contribution that is required?

Mr. PEARKES: There was a plan drawn up in 1957 which is known as "NC-70". That plan was agreed upon by the NATO council in that year. It defined the countries' contribution or goal. All the countries were urged to build up to that goal which was set at five years from that date.

Mr. SMITH (*Calgary South*): Have we reached our goal?

Mr. PEARKES: To all intents and purposes.

Mr. SMITH (*Calgary South*): I would like to ask you a final question, sir. "To all intents and purposes," I assume is figuratively "yes"?

Mr. PEARKES: Yes.

Mr. SMITH (*Calgary South*): You mentioned at our last meeting that there was a possibility of the withdrawal of forces from the brigade in circumstances where another country was able to maintain or make a greater contribution towards its goal, and I think West Germany was the case in point. Is there any likelihood—I am thinking of the cost to Canada—that we can anticipate a reduction in our contribution to NATO because some other country has reached its goal in respect of its NATO contribution.

Mr. PEARKES: There is at the present time no consideration for the reduction of our forces in respect of NATO.

Mr. WINCH: I would like to ask a question, in view of an answer that we received earlier in our meeting today, dealing with defence.

I gather from what the minister said in respect of the Royal Canadian Navy that it is, to a great extent, under NATO in the Atlantic area. We have

NORAD, and we have the Bomarc. I would ask, therefore, through you, Mr. Chairman, and in view of what the minister has said about only having control on the Atlantic coast under NATO, and in view of the fact that the Bomarc is only located in Ontario and Quebec, what arrangements have been made for the defence of Canada from Winnipeg to the west coast.

Mr. HELLYER: Mr. Chairman, on a point of order. We are considering NATO.

Mr. WINCH: This has regard to NATO. NATO is involved on the Atlantic coast but not on the Pacific coast. The Bomarc is located on the eastern coast.

The CHAIRMAN: Mr. Winch, when we are considering NORAD your questions will be answered automatically.

Mr. WINCH: I will ask this question in respect of NATO only then.

The CHAIRMAN: There is no NATO force on the Pacific coast.

Mr. WINCH: The minister comes from the same province that I do, and I would ask him why—

Mr. CHAMBERS: British Columbia is not on the Atlantic.

The CHAIRMAN: NATO is not involved in the Pacific area. It is the North Atlantic Treaty Organization.

Mr. WINCH: I am waiting for an answer to my question. Why are all the defences in Canada in the east and not in the west?

Mr. PEARKES: That is not correct.

Mr. WINCH: Then will you give me an answer as to what the defences are in the west from Winnipeg to the coast?

The CHAIRMAN: That does not involve NATO at all, Mr. Winch. NATO, as you know, is the North Atlantic Treaty Organization. When we are considering NORAD you will receive answers to these questions.

Mr. WINCH: I believe that the North Atlantic Treaty Organization does—

The CHAIRMAN: It has nothing to do with the Pacific area.

Mr. WINCH: It is not geographically located in the west.

Mr. BALDWIN: This is subject to the terms of agreement. If you look at that agreement, you will see it set out there.

Mr. HELLYER: I assume we are adjourning now?

Mr. PEARKES: I will answer your question at the proper time.

Mr. HELLYER: There are two things I did not hear in respect of an earlier interjection on the part of Mr. Chambers.

Someone pointed out to him that he undertook to speak on behalf of the Liberal and the C.C.F. parties. I do not wish to speak on behalf of the C.C.F. party, but may I say on behalf of the Liberal party that if Mr. Chambers said anything in respect to the use or otherwise of atomic arms on our behalf, I would suggest to him that we will do our own speaking in this matter.

We do feel that we have the right to have a clear statement on policy from the government which was elected to make policy and to govern this country.

The other point I wished to raise is in respect to the possibility that we may be considering NORAD at our next meeting. If that is the case, I would ask the Minister of National Defence if he could arrange to have someone from his department bring a map of the North American continent so that we may have it before us.

Secondly; I would ask if it is possible to have one of his officials draft a diagram showing the effect of a five megaton explosion on the site of the Bomarc station at North Bay, and also showing the radius of the destruction and the anticipated fall-out pattern so that we could have an idea of what is involved from this type of thing.

The CHAIRMAN: Could that be made available, Mr. Minister?

Mr. CHAMBERS: I would like to point out that I was not making Liberal policy. I was thanking Mr. Hellyer for making Liberal policy so clear this afternoon.

The CHAIRMAN: Just a moment, please.

Could those maps be made available, Mr. Minister?

Mr. PEARKES: We will try to do this. You are assuming, Mr. Hellyer, that a bomb was dropped at North Bay?

Mr. HELLYER: Yes, that a five megaton bomb was dropped at the Bomarc base there.

Mr. PEARKES: Do you wish us to show the general area of the fall-out?

Mr. HELLYER: Yes.

Mr. WINCH: I would like to ask if it is possible for the minister to have something else at our next meeting.

In view of the fact that if the project is successful we are going to have two Bomarc stations in Canada, I would like the minister to show us a plan in respect of similar defence in western Canada covering in particular B.C. and Alberta.

The CHAIRMAN: That will be covered in our considerations of NORAD. Has any member a further question on NATO?

Mr. CARTER: Yes, I have further questions. I thought we were adjourning.

The CHAIRMAN: There has been no suggestion that we adjourn.

Mr. CARTER: We usually adjourn at this hour and I thought that was the plan.

The CHAIRMAN: Is that the wish of this committee?

Mr. WINCH: I would like to know first of all if there are going to be two Bomarc defensive stations in western Canada. Could the minister give us that information, if it is not classified? I would like to know what the position is as far as Alberta and B.C. are concerned.

Mr. PEARKES: There is a proposal being considered at the present time in Congress today. There is the general proposal that there will be two Bomarc sites on the west coast. If these two Bomarc sites are established they will give coverage to the west coast cities.

The area in between is being covered by interceptors of the United States air force as well as the squadron of CF-100's we have at Comox.

I would not feel it proper for me to show where the centres are along the border of the United States. I think that would be a very unwise thing to do.

Mr. WINCH: Then, damn it, Mr. Chairman—

Mr. PEARKES: I do not care whether you damn it or not.

Mr. WINCH: I feel a little bit incensed about this. It has been known for a long time where Canada is going to place two Bomarc stations. This information is available not only to us, but to others. If an enemy wants to know, they can easily find out where these stations are. My God, this information has been published everywhere, and many statements have been made about it. You are saying to me that you cannot tell me where our defence establishments are in the province of British Columbia, where you come from, too?

The CHAIRMAN: The arrangements have not as yet been made with the United States, Mr. Winch.

Mr. PEARKES: Regarding the information about the location of the Bomarc stations which have appeared in the paper, I can assure you that these proposed locations are not settled as yet.



Mr. WINCH: Those locations have certainly been settled in respect of Canada?

Mr. PEARKES: No, this is not settled.

Mr. WINCH: You are now working at North Bay and you are working in Quebec on these defensive establishments. I am asking you if you can tell us where our defences are to be located in B.C.

Mr. PEARKES: You know perfectly well about the discussions which have been taking place in the United States. First of all there was a recommendation in the house of representatives. There was then a counter proposal from the senate. These proposals have been harmonized, and by tomorrow morning we shall know exactly what the position is. Owing to the United States form of government, it is very difficult for us to form plans.

Mr. WINCH: Do I understand then that, irrespective of what happens today, as far as Canada is concerned, there is no defence for western Canada?

Mr. PEARKES: The defence of the North American continent is arranged between two countries. The detection against possible bomber attacks coming in over the Pacific coast is arranged for by the interceptor squadrons of the United States air force.

The CHAIRMAN: Mr. Winch, we are getting into a NORAD discussion here. We will be considering NORAD as soon as we are finished with NATO.

Mr. WINCH: I would still like to know why you do not have NATO forces in British Columbia.

Mr. CHAMBERS: The province of British Columbia is not covered by NATO.

The CHAIRMAN: We will find out more about NORAD at our next meeting. Is it the general wish of the committee to adjourn now?

Some hon. MEMBERS: Agreed.

The CHAIRMAN: We will adjourn now until Friday morning at 9.30 o'clock.



## ORDER OF REFERENCE

THURSDAY, June 23, 1960.

*Ordered*,—That the name of Mr. Spencer be substituted for that of Mr. Thompson on the Special Committee on Defence Expenditures.

Attest.

L.-J. RAYMOND,  
*Clerk of the House.*





## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

FRIDAY, June 24, 1960.

(16)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Baldwin, Carter, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Macdonald (*Kings*), Smith (*Calgary South*), Spencer, Winch.—11.

*In attendance:* Honourable George R. Pearkes, V. C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (*Finance*); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns.

The Chairman informed the Committee of decisions arrived at and recommended by the Subcommittee on Agenda and Procedure (*Steering Subcommittee*).

Copies of a brochure respecting Canadian Defence policy as expressed by the Minister of National Defence before the Committee were distributed to all Members, as also an illustrated pamphlet entitled "Manning the Dew Line".

The Committee resumed from Wednesday, June 22nd, consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61.

Mr. Pearkes was further questioned at length.

And consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61 still continuing, it was adjourned until the following meeting.

At 10.50 o'clock a.m. the Committee adjourned to meet again at 3.30 o'clock p.m. Wednesday, June 29.

Antoine Chassé,  
*Clerk of the Committee.*





## EVIDENCE

FRIDAY, June 24, 1960.

9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. Thank you for being on time. We are starting only one minute late.

At the steering committee meeting it was decided that we would not have a meeting on July 1, Dominion Day, but instead we would have a meeting at the regular time in the morning on Thursday, June 30.

It was also decided, with one dissenting voice, that Mr. Green would be called before the steering committee, and at that time it will be decided whether he should be called before the committee as a whole.

The third thing that was decided at the steering committee meeting was that the Chair has been lenient as far as statements have been concerned before questions were being asked, but that an attempt should be made to cut down the statements. Every person present at that meeting promised to do so.

Mr. WINCH: I do not remember that going to a vote, but it is o.k.

Mr. SMITH (*Calgary South*): I thought the greatest support for that ruling came from Mr. Hellyer and Mr. Winch; as I recall.

The CHAIRMAN: So with the co-operation of everyone present I know we can finish these meetings and cut down on the length of time required.

Copies of the minister's statements have been distributed this morning. This is the Canadian defence policy. It is merely a brochure of the statements made before this committee, and it already appears in the record. There was also distributed a pamphlet on Manning The Dew Line. I think you will find these both interesting.

At the last meeting we were supposedly discussing NATO. It seems to me we veered off that discussion into a discussion on NORAD. If we could continue now and complete our questions on NATO, strictly, perhaps we can finish this item.

Are there any further questions or shall the item carry?

Mr. SMITH (*Calgary South*): May I just perhaps point out to the Chair that I am sure a number of us will have further questions in regard to NATO when we actually have the estimates before us.

The CHAIRMAN: I realize that. I am now talking about the general item. We all realize that we shall be coming back to our considerations of the United Nations, NATO and NORAD when we reach our item by item consideration.

Shall we move on to questions in regard to NATO at this point.

Mr. CARTER: I have several questions, Mr. Chairman.

The CHAIRMAN: Before you begin, Mr. Carter, I want to welcome Mr. Spencer to the committee. He is taking the place of Mr. Thompson.

All right, go ahead Mr. Carter.

Mr. CARTER: The minister at one of our previous meetings, not too long ago, mentioned the Bobcat, and said that the Bobcat was being considered as a personnel carrier. Is it a fact that the Bobcat has been found to be vulnerable to anti-tank weapons?

Hon. G. R. PEARKES (*Minister of National Defence*): Is vulnerable to what?

Mr. CARTER: That it is vulnerable to anti-tank weapons?

Mr. PEARKES: It is vulnerable to anti-tank weapons. That is, a direct hit by an anti-tank weapon would destroy the Bobcat.

Mr. CARTER: It is no more vulnerable than the previous type of weapons used?

Mr. PEARKES: Oh, it is far less vulnerable than the universal carrier.

Mr. CARTER: Yes. What kind of machine gun is being supplied to our troops?

Are they air cooled or water cooled?

Mr. PEARKES: There are no water cooled machine guns in use now by our forces. They are all air cooled.

Mr. CARTER: Is it contemplated that the air cooled machine gun will be replaced by the water cooled weapon? The water cooled weapon is much more efficient than the air cooled weapon, I understand.

Mr. PEARKES: I have no knowledge of any intention to replace the present machine guns which are being used. The troops now have a 50 calibre machine gun which gives an increase in fire power to our infantry battalions. There are 30 of these weapons with the brigade on the basis of 10 per infantry battalion.

The CHAIRMAN: Have you a supplementary question, Mr. Smith?

Mr. SMITH (*Calgary South*): No, it is not supplementary.

The CHAIRMAN: Will you go ahead, Mr. Carter.

Mr. CARTER: I am moving to a different subject, Mr. Chairman.

Mr. HELLYER: I have one supplementary question in respect of the Browning machine gun. I think it is the Browning machine gun which is in present use.

The CHAIRMAN: What was your question, Mr. Hellyer?

Mr. HELLYER: I just wanted to establish that it is the Browning machine gun which is in use.

The CHAIRMAN: You are asking if it is the Browning machine gun which is still in use?

Mr. PEARKES: I think the Browning has been replaced.

Mr. HELLYER: What was it replaced with? Mr. Chairman, I think we could get this information for another meeting.

The CHAIRMAN: We could, undoubtedly.

Mr. PEARKES: I cannot tell you.

The CHAIRMAN: We will get that information for another meeting.

Mr. Smith.

Mr. SMITH (*Calgary South*): Mr. Minister, I wonder if you could tell the committee what practical exercises are undertaken in the various elements of NORAD to test the effectiveness of our forces? I wonder, when you answer that question, if you would be kind enough also to make some reference to the air exercises in which our division has been so successful in competition with other contributing countries. I realize that this is only one small aspect, but during the last war there were a number of exercises carried out to test the effectiveness, as an example, of the Canadian force in Europe. What does NATO do to employ a system to determine the effectiveness of our forces of NATO so as to be sure that they are operationally efficient?

Mr. PEARKES: There are NATO exercises carried out by various commands in Europe. They are exercised at various stages; sometimes with just single aircraft taking off, and sometimes larger exercises.

Mr. SMITH (*Calgary South*): Do they have simulated attacks?

Mr. PEARKES: They have simulated attacks from bomber aircraft in NATO. As far as the competitions that you were referring to, they were gunnery competitions.

Mr. SMITH (*Calgary South*): Yes.

Mr. PEARKES: Canada has been very successful in this regard. I know they won the competition against all allied air forces in Europe on a number of occasions.

Mr. SMITH (*Calgary South*): I think they have won this competition on the last three occasions.

Mr. PEARKES: That is my impression. They have won it the last three years, that is correct.

Mr. SMITH (*Calgary South*): If this is considered to be, in any way, information which is of a restricted nature, you will naturally tell me, but you mentioned that there were simulated attacks which occur with a view to testing the various elements. I wonder, sir, if there are any major exercises in which all elements of the NATO forces are involved in an area?

Mr. PEARKES: There are NATO exercises carried out in respect of ground manoeuvres in Germany. There are NATO naval exercises carried out practically every fall in different parts of the ocean, and there are various air exercises carried out.

Mr. SMITH (*Calgary South*): To my question, then, in respect of whether there were general exercises involving all elements, your answer probably would be "yes"?

Mr. PEARKES: I cannot go so far as to say they involve all elements, because that might be considered to include the Canadian and United States air regional command. When we reach our consideration of NORAD, you could ask me that question again.

Mr. SMITH (*Calgary South*): I propose to, sir.

Mr. PEARKES: I could possibly give you more information about that.

The CHAIRMAN: Thank you, Mr. Minister.

Mr. CARTER: I would like to come back to the statement which the minister made at page 196 of the minutes of this committee.

The CHAIRMAN: Which page?

Mr. CARTER: At page 196.

In that statement the minister outlined the Soviet objectives as the consolidation of communist rule at home—that is in Russia; the strengthening of communist ideology in her Eastern European Bloc; the disruption of NATO and the undermining of Western defence measures generally; and the expansion of Soviet influence in Afro-Asian countries. Then he went on to say:

To cope successfully with this total threat, Canada must have a total strategy within which all elements—the military, the political, the economic and the psychological—are closely coordinated and in proper balance.

My question is this: what is Canada doing in the way of preparation for psychological warfare or defence against psychological warfare?

Mr. PEARKES: There are no funds in these estimates for the direct combat of psychological warfare.



The matter of psychological warfare has been discussed at NATO conferences, as well as within our own organization.

The CHAIRMAN: There are no funds in these estimates in that regard?

Mr. PEARKES: There are no funds in this years estimates directly attributed to this. Mind you, we have funds provided for chaplain services, and we have stressed as part of the duties of the officers the informing of their men of current events. This is an indirect way in which we are combating any possible psychological warfare.

The CHAIRMAN: Have you questions in regard to NATO?

Mr. CARTER: I would like to pursue this a little bit.

The CHAIRMAN: We do not have any money in this year's estimates, Mr. Carter.

Mr. CARTER: I think it is a matter of policy though, whether we should or should not have money in this regard.

I would like to know if I may understand from the minister's statement if that is what the minister has in mind in regard to psychological warfare, and I am speaking of the chaplain services, current events and that sort of thing?

Mr. PEARKES: I said those are some of the steps that this department is taking in order to combat any influence which might be started with the idea of undermining the morale of the troops.

Mr. BALDWIN: On a point of order, Mr. Chairman. I wonder if Mr. Carter has appreciated correctly the statement. The minister did not say anything about psychological warfare, he said in his statement that this is the direction they are proceeding in respect to the threat to our national security. He said it is not only military, it is political, economic and psychological. I read nothing in his statement suggesting that he was talking about psychological warfare.

The CHAIRMAN: I believe you are right.

Mr. CARTER: On that point of order, Mr. Chairman. The minister himself said:

To cope successfully with this total threat, Canada must have a total strategy within which all elements—the military, the political, the economic and the psychological.

Apparently we do not have a total strategy because we have done nothing as far as psychological warfare is concerned, apart from the chaplain services and the instructions to officers to inform the men of current events.

Mr. PEARKES: I said there were no funds directly included in this year's estimates in respect of psychological warfare. I said in order to combat any possible influence or attempt to undermine the morale of the troops, the officers are instructed to inform the troops of current affairs, and we are providing the chaplain services, and that sort of thing. There is quite a distinction here between psychological warfare and ideological warfare.

Mr. BALDWIN: Mr. Chairman, to pursue that point of order. If you deal with psychological warfare then you must deal with economic warfare. Thus we could have the Minister of Finance and the Minister of Trade and Commerce come here.

The CHAIRMAN: Mr. Carter, if you feel we should provide money in these estimates for psychological warfare you can make a speech in the House during the estimates, and make the suggestion to the minister. All we are doing here is going through the estimates of 1960-61, in which there is no money provided for psychological warfare; and, therefore, any questions on it are out of order. Have you another field, Mr. Carter?

Mr. CARTER: I have made several speeches on this in the House.

The CHAIRMAN: You can certainly make another one.

Mr. CARTER: I would like to ask, is the minister familiar with this little booklet, *General Military Review*?

Mr. PEARKES: No, I have not seen that. By whom is it published?

Mr. CARTER: It is published by a former Commander-in-Chief of NATO. It has a Canadian sponsor.

The CHAIRMAN: What is its title, who is the writer, and who is the publisher?

Mr. CARTER: It is called, *The General Military Review*. I understand it is an informal publication for senior military leaders of the NATO forces.

Mr. PEARKES: Is that a NATO publication?

Mr. CARTER: No, it is an informal publication, published and sponsored by leaders of NATO.

The CHAIRMAN: Are you recommending that the minister read it, Mr. Carter?

Mr. CARTER: Yes, there is an article there I think not only the minister but all our chiefs of staff should read.

Mr. PEARKES: If you will send me a copy, Mr. Carter, I will be very pleased to look at it, and see if it is worth spending money on to issue it to the forces.

Mr. CARTER: It is in French. I would ask the minister to have it translated and circulated.

Mr. SMITH (*Calgary South*): Perhaps Mr. Carter could give us a translation.

Mr. CARTER: I could give you a translation.

The CHAIRMAN: Do you have another field to question on, Mr. Carter?

Mr. CARTER: I would like to read three or four statements on that.

Mr. MACDONALD (*Kings*): Could we have the name of the author?

The CHAIRMAN: Mr. Carter, are these statements regarding psychological warfare?

Mr. CARTER: Yes.

The CHAIRMAN: Then they are out of order, because we are not providing any money for that purpose.

Mr. CARTER: It has to do with ideological warfare.

The CHAIRMAN: We are not spending any money on that either, so that is out of order.

Mr. SMITH (*Calgary South*): I have a "psychological" question to ask the minister, but we do have an amount in the estimates for it. It involves, sir, the old problem of the uniforms of our forces in NATO. The morale of these forces is extremely important to you, I know, and I have in front of me an article which, while it maintains the morale of the forces is high, it states that one of the "pet hates" of our servicemen in relation to equipment and uniforms of other NATO forces, is the uniform. It speaks of course, of the large amount of yard goods we have in stock in Canada for uniform purposes. I wonder if you would comment on this? It has been raised before. I wonder if there is any suggestion by your defence officials to re-equip or provide additional service dress for our NATO forces—or for the Canadian army, of course?

Mr. PEARKES: From time to time new articles of uniform are recommended to me. For instance, we provided new caps for the army about a year ago.

I think the air force has got some new items of uniform too. But, on the whole, my impression is that the troops are very well satisfied with the uniforms which they are using.

Mr. SMITH (*Calgary South*): Well, I would perhaps say then, sir, this is just an honest but basic disagreement between the author of this story and yourself.

Mr. PEARKES: We are rather dealing with matters of general policy now. When we come on to the individual items we would have the officials of the different branches responsible, and we could give you that information.

Mr. SMITH (*Calgary South*): I have further questions on that, Mr. Chairman, but I will defer them until that time.

Mr. CARTER: Mr. Chairman, I think if we are here to discuss any policy at all, it should be in order to ask the Minister if he thinks ideological warfare is so unimportant that no provision need be made for it.

The CHAIRMAN: The point is that we are concerned only with the estimates of this year and, inasmuch as there are no moneys in these estimates for this type of warfare, such questions are out of order and you must appreciate the fact that he does not think it is worthwhile right now.

Mr. CARTER: If the Minister is prepared to say that, I will accept that answer.

Mr. PEARKES: I said there are no direct funds there, but we are doing a tremendous lot to maintain the morale of the forces. As I have told you already, over in Europe we have schools for the dependents; we have all kinds of athletic contests; and the welfare of the troops is looked after in a way I do not think any troops have ever had efforts made for them in the past; and the result is that the morale of the forces in Europe, both air force and army, is, from all the reports I get, extremely high.

Mr. CARTER: If you are talking about such things, there should be some money in the estimates for schools and that sort of thing.

The CHAIRMAN: There is, undoubtedly.

Mr. CARTER: We are talking about ideological warfare, according to what the Minister understands by that expression. That is not my understanding at all. I do not think that has anything to do with it. It has something to do with morale, but certainly does not have anything to do with ideological warfare.

The CHAIRMAN: That is your conception.

Mr. CARTER: It is not only my conception, and that is why I referred to that booklet.

Mr. PEARKES: It is an unofficial booklet, I take it?

Mr. CARTER: It is not official, but it is important.

Mr. PEARKES: Anybody can write a book and express any opinions they like.

The CHAIRMAN: Do you have another field of questioning, Mr. Carter?

Mr. CARTER: I was trying to—

Mr. PEARKES: What organization has published that?

Mr. CARTER: It is published by General Carpentier who was at one time senior commander of NATO forces; and his ideas and views should be worth consideration by the NATO countries.

The CHAIRMAN: Are you not going to lend the Minister that book?

Mr. CARTER: Yes.

The CHAIRMAN: That is fine.



Mr. CARTER: I was trying to get a translation of this article, but it is in French, and I took it to the translators and they are too busy to do it.

Mr. SMITH (*Calgary South*): Then you do not know what is in it yourself?

Mr. CARTER: Yes, I know what is in it.

Mr. SMITH (*Calgary South*): Good. I would like to see that.

The CHAIRMAN: Do you have any further question on NATO?

Mr. CARTER: I am going to pursue it further, at a later time.

The CHAIRMAN: Are there any more questions on NATO? Carried?

Agreed to.

The CHAIRMAN: We are on NORAD.

At the last meeting Mr. Hellyer, on page 341, asked the minister if he could arrange to have someone from the department bring a map of the North American Continent, so we could have it before us. He also asked:

—if it is possible to have one of his officials draft a diagram showing the effect of a five megaton explosion on the site of the bomarc station at North Bay.

Do you have those maps here, Mr. Minister?

Mr. PEARKES: Yes, the map here shows a bomb burst in the immediate vicinity of North Bay. It is a five megaton bomb. The height of burst was estimated to be 854 meters. The diagram showing the fallout is the estimated fallout which would have occurred had this bomb burst yesterday. It is taken from the existing wind conditions and temperature conditions as of yesterday. It shows the area which would be affected by fallout. It goes almost up to Montreal. Montreal is there. These are the estimated hours at which the fallout would come to the various areas. For instance, this is the one-hour circle; this is the two-hour, which takes it almost to Pembroke, which is here. This is the three-hour field, which comes north of Ottawa. There is Ottawa. This is the four-hour; and this is the five-hour period. Montreal itself would not have been affected by that fallout.

The CHAIRMAN: Were those constant wind conditions yesterday? Would that have happened all of yesterday?

Mr. PEARKES: This would have happened yesterday, presumably for the whole of yesterday. What time was this estimated?

Major F. S. CORBEAU: It was valid to three o'clock this morning, sir.

The CHAIRMAN: Are there any questions on that, Mr. Hellyer?

Mr. HELLYER: While the minister is on his feet, does he want to deal with the chart with respect to blast?

Mr. PEARKES: You asked for the blast effect. This is North Bay here, and this is assuming that a bomb burst about seven miles north of North Bay. These are the various circles showing the effect. The red one is the two-mile radius in which there would be complete destruction, and in which it is expected everybody would be killed. The blue one is the five-mile radius, where buildings would be demolished or severely damaged, walls and roof collapsed, steel frame buildings severely distorted. The eight-mile radius is that "C" ring, and that comes to North Bay. Houses would be damaged beyond repair, frames distorted, walls cracked, doors and entrances jammed. Then you have the ten-mile radius, which would include all North Bay. Houses and buildings would be uninhabitable under normal conditions.

Mr. HELLYER: I had not thought we would start out on this, but under these circumstances, Mr. Minister, could you give us any indication as to why the site would be located so close to the city that it would cause damage of such a considerable nature?

Mr. PEARKES: The site was located for many reasons, some technical. They were influenced by the radar coverage which would enable the Bomarc to take full advantage of the radar coverage that exists, according to the distance from the Pinetree and mid-Canada line. It is considered extremely unlikely that intercontinental ballistic missiles would be directed against a single Bomarc station.

Mr. HELLYER: Why do you say it would be considered extremely unlikely?

Mr. PEARKES: Because if they get enough intercontinental ballistic missiles to allocate one to a single Bomarc station, they would not likely be bothered. They would have so many missiles ready to swamp the whole continent anyway, and I see very little likelihood of an attack of that magnitude being followed up by bomber attack.

Mr. HELLYER: But in the event that they wanted to get through with bombers to take a look at hardened sites to see what damage they had done, it would be more likely they would try to take out a corridor of this type of attack?

Mr. PEARKES: I think it would be very unlikely that the Russians would have, in the foreseeable future, enough missiles that they would direct an intercontinental ballistic missile against one isolated Bomarc station, which is not a particularly easy target to define or to hit.

Mr. SMITH (*Calgary South*): Mr. Chairman, I have a question in relation to a statement, or opinion, that was given by one of our colleagues, Mr. Regier, in the house yesterday. I think it is important that we have the views of you, sir, as Minister of Defence and as chairman of the EMO committee to comment on.

I am quoting from this morning's *Montreal Gazette*. Mr. Regier said he is worried that Canadians are being led to think there is hope for survival in nuclear war. He says:

There is no defence, and we will not survive a nuclear war. He also said that he felt utter dismay at the government's recent publication of a booklet—and I am not dealing with the booklet—on how to build basement shelters against radioactive fallout. He also said this:

I hope this is not part of a conditioning process of the public mind.

One gathers from this that his conclusion is that there is, then, little or no object in doing anything; that in the event of an attack, we are all dead ducks.

My question to you, Mr. Minister, is that this is surely a statement that has to be thoroughly qualified by the very nature of your diagram, by the very nature of the intensity of the attack; and in your dual capacity, if we accepted this statement, we might just as well throw in the towel. Would you comment on that statement? I think it is important that you should.

Mr. PEARKES: I think it is a defeatist statement, and I think it is quite incorrect, because if proper precautions are taken, hundreds of thousands of lives can be saved and the nation can survive under the type of nuclear bombardment that is foreseeable in the immediate future.

Mr. SMITH (*Calgary South*): Is it not also possible, sir—and this, of course, is complete surmise—that Canada as such, or that Canadian targets as such, are so widely dispersed and probably of such a secondary importance in relation to the main targets, which obviously are going to be strategic command bases and other major American cities, that we would, in some instances—and this is pure supposition—be on the fringe area of such an attack? Our major cities, of course, would be subject to the full impact.

Mr. PEARKES: We always consider that the primary targets of a Russian attack would be the bases of retaliation, which are located in the United States.

If they are overcome, if they are defeated and there is no chance of a strike back by the United States and western forces, why, then, of course we will have lost the war.

But that is the first, and major, primary target which the Russians are almost certain to select.

The CHAIRMAN: Is that pretty well the consensus of the leaders of NORAD, Mr. Minister?

Mr. PEARKES: Yes, that is my opinion, based on the advice that I have received from senior officials.

Mr. SMITH (*Calgary South*): Since we are on NORAD, as I assume we are, Mr. Chairman—

The CHAIRMAN: Yes; the statement is at page 251 of the minutes.

Mr. SMITH (*Calgary South*): I wonder if the minister would be kind enough—because this is directly related to it—to indicate how we test, or whether we test, our air defence system in NORAD.

What exercises are involved, and to what extent are these defences tested?

Mr. PEARKES: Constant, and I think I can say realistic, training is being carried out. That is essential. There are practice interceptions under the control of the ground radar. These are carried out almost daily.

The training must be progressive and it is not limited to merely one fighter squadron and one radar station. Larger scale exercises, including groups of squadrons and radars are carried out periodically.

Unless there is a thorough and complete test, the efficiency and the effectiveness of our continental radar system will not be known and will be more uncertain than is desirable. Indeed, it is my opinion that the whole continental-wide system should be exercised as soon as possible, because a NORAD exercise of this nature would test our warning and control system, communications and the anti-jamming equipment that we have.

It should be recognized that if an exercise of this nature was proceeded with, the number of aircraft in the air would make it necessary to place restrictions on civil and other military aircraft during the hours of the exercise.

Mr. SMITH (*Calgary South*): You mentioned your belief, or view, that there should be a general exercise to test all elements. Are there any plans developing with this view in mind?

Mr. PEARKES: This is under discussion now with the NORAD authorities.

The CHAIRMAN: Did you have a supplementary question, Mr. Baldwin?

Mr. BALDWIN: Mr. Chairman, I have a question that follows along with what the minister said just before this, when he, as I understood it, made reference to the fact that attacks might well be concentrated against industrial and strategic centers.

I wonder if the minister would like to comment on the possibility that this might emphasize the desirability of some decentralization, not so much economically, in a national way; but the decentralization of industry and population to provide nuclei of rehabilitation—because I understand that is one of the ideas that the Russians have in mind, that they have a great decentralization of their industry and their population so that they always feel sure there will be various nuclei where national rehabilitation could commence.

The CHAIRMAN: You are suggesting, Mr. Baldwin, some factories from Toronto to Alberta?

Mr. BALDWIN: You put in three words, Mr. Chairman, what I put in twenty-five: that is right.



Mr. PEARKES: From the defence point of view there is no doubt about it, that the decentralization of industry would be very desirable. But there are immense problems in connection with that.

Mr. BALDWIN: I understand that.

Mr. PEARKES: There perhaps should be some steps taken to encourage industries to start up in centers other than this immediate triangle between Montreal, Toronto and Niagara.

Mr. HELLYER: There have been a number of statements and suggestions recently to the effect that, as an expression of Canadian independence, this country should withdraw from NORAD. Would the minister give the committee his views on this question.

Mr. PEARKES: I have very frequently stated that I think the defence of the North American continent is quite indivisible and it would be quite unrealistic for Canada to attempt to provide a defence of her own, purely for the defence of the territory of Canada.

The main defence that we have against war today is the deterrent effect of the forces of retaliation.

Mr. HELLYER: In view of our geographical position, it just would not be feasible, or realistic, to consider any withdrawal?

Mr. PEARKES: That is my opinion. We are in partnership with the United States. Canada is not providing very much towards the forces of retaliation—very, very little. We are making considerable contributions, though, towards the protection of those forces.

Mr. SMITH (*Calgary South*): Mr. Chairman, may I ask a supplementary question?

The CHAIRMAN: Yes.

Mr. SMITH (*Calgary South*): Do you think that perhaps, having expressed the view that we should not withdraw, we should not even extend the principle of NORAD with the United States, recognizing the principle as to why we signed an agreement, in that each country should work out what each can do best, and recognition of our geography, our economic resources—

Mr. PEARKES: That is what I believe we are trying to do continually. We are having meetings regularly at various levels. On the 12th and 13th three ministers of the United States are coming here to Ottawa for discussion with their counterparts here. I firmly hold to the belief that we should strengthen this partnership and that each of us should play our part in the areas in which we can make the greatest contribution without undue strain on the financial and manpower resources of the country.

Mr. SMITH (*Calgary South*): One could conclude, then, that you actually believe in even more cooperation, rather than less cooperation?

Mr. PEARKES: I believe our cooperation is satisfactory at the present time. I do not suppose you can have too much cooperation. We are cooperating with them. All the facilities for exchange of opinions are there; and I would say that between the services and between the Department of National Defence and the Department of Defence in the United States there is very close and continual cooperation.

The CHAIRMAN: You had a supplementary question on that point, Mr. Winch, had you?

Mr. WINCH: Yes, Mr. Chairman, on the same thing. In view of the statement of the minister, when he said, I think, the main, or the major deterrent to aggression is the retaliatory force—that being so, and under present conditions, is not the contribution of Canada in NORAD almost wholly a warning system for the United States?

Mr. PEARKES: It is a warning system which will be of great assistance to the forces of retaliation in the United States. It will enable a larger number of the bomber forces to get off the ground, and therefore be less vulnerable if there is an attack.

There is also a warning system for the civilian population, so they can take such measures as have been arranged, or considered desirable, for their own protection.

Mr. WINCH: May I ask this, then: first, there is no defence that we know of at the present moment against the intercontinental ballistic missile?

Mr. PEARKES: There is no defence against the intercontinental ballistic missile known today other than the threat of retaliation.

Mr. WINCH: Yes.

Mr. PEARKES: And the advantage of the western position is that their forces of retaliation are not centralized in any way: they are distributed not only throughout the United States, but in many parts of the world.

Mr. WINCH: On the warning system—

Mr. HELLYER: Mr. Chairman, I would suggest that in this committee we follow a practice similar to that followed in the banking and commerce committee of letting a questioner pursue a line of questioning, and that any interruptions in respect of supplementary questions be strictly relevant.

The CHAIRMAN: I asked Mr. Winch if this was a supplementary point and he said it was.

Dr. Fairfield, you had a supplementary question.

Mr. FAIRFIELD: A gentleman in the United States who formerly was a Canadian commentator put out an article suggesting that Canada should withdraw from NATO, NORAD and so on. Does the minister think that a policy of neutralism is possible or even feasible for Canada.

Mr. PEARKES: A policy of neutralism is not the policy of the Canadian government.

Mr. HELLYER: Would you say that so long as the Russians have a substantial inventory of bombers that it would be necessary to maintain a detection and identification system as far away from the target areas as possible.

Mr. PEARKES: That would be desirable.

Mr. HELLYER: The suggestion has been put forward by the leader of the Liberal party that NORAD should become an integral part of NATO. What is the minister's feeling in respect of that suggestion?

Mr. PEARKES: NORAD is part of the NATO concept in that it is looking after and providing the defence of the Canadian-United States region of NATO. This is so far removed, at the present time, from the European activities of NATO that I do not think the European members of NATO would have the time to be able to take an intimate interest in the Canadian-United States region. The activities in the development of defences of the Canadian-United States region are explained at the various NATO meetings. There never has been any indication from our European partners that they would have any desire to take a part in the defences of this Canadian-United States region. They mainly are interested in the exchange of warning information. NORAD also is interested in obtaining the early warning from the warning systems in Europe. So the main point of contact is the early warning that can be given either to Europe by the Canadian-United States region, or to the North American continent by the European system.

Mr. HELLYER: Is it not true, as the threat shifts from bombers to missiles of various types and the reaction time reduces substantially, that the two

areas become much more closely related in that retaliatory action or defensive action in both regions—the Continental Europe area and the North American area—would have to be exercised practically simultaneously.

Mr. PEARKES: That is correct. You see an instance of that in the establishment of one of the BMEWS stations in northern England.

The CHAIRMAN: Mr. Winch, do you have a supplementary question?

Mr. WINCH: Yes. I do not see how you can put these things in separate pockets.

The CHAIRMAN: Try.

Mr. WINCH: The minister has stated our major purpose is that of being able to give warning whether NORAD is separate or tied in with NATO. That logically brings up this question. There are three radar lines in Canada. Is it possible for those radar lines to detect and therefore give any warning of intercontinental ballistic missiles.

Mr. PEARKES: No.

Mr. WINCH: It is absolutely impossible?

Mr. PEARKES: They do not have the radar equipment at the present time, nor do I think does the United States have any of their warning lines which would pick up that. The warning of an intercontinental ballistic missile attack would come from the three stations which are maintained—one in England which is under development, one in Greenland and one in Alaska—which are known as the BMEWS stations. They can give warning of missile attack.

The CHAIRMAN: Do the three of them as a group blanket all the Soviet?

Mr. WINCH: So far as our radar lines are concerned, they are out so far as the warning is concerned?

Mr. PEARKES: They can give warning against bomber attack.

Mr. WINCH: And of supersonic attack?

Mr. PEARKES: Yes.

Mr. WINCH: That is a warning for the United States?

Mr. PEARKES: And for our own people.

Mr. WINCH: Are we in the position of being able to meet a supersonic bomber attack in Canada?

Mr. PEARKES: We have no Canadian interceptors which would be able to deal with a supersonic attack. That is why we hope the arrangements can be completed for the installation of these two Bomarc stations. If we have those, there will also be the American Bomarc stations and the American interceptors.

Mr. WINCH: If they are successful they would be able to meet a supersonic bomber?

Mr. PEARKES: Yes.

Mr. WINCH: So the only defence we would have against a supersonic attack is with the Bomarcs.

Mr. PEARKES: In the Canadian manned defence; but remember we are in a partnership and there is a very large number of United States airforce interceptors which are stationed across the country which are part of the joint defence.

Mr. SMITH (*Calgary South*): Surely, Mr. Minister, you have stated previously that in dealing only with bombers—with the Buffalo, the Bison, et al—you consider the Canadian squadrons part of NORAD and to some degree—and this degree perhaps is undefinable at this point—would be part of the defence system which would meet an attack of this nature. Otherwise one has to ask himself what are these squadrons for?



Mr. PEARKES: Of course these squadrons are there for the defence against a type of bomber which the Russians have. To my knowledge the Russians have no supersonic bombers at the present time.

Mr. SMITH (*Calgary South*): The key to the whole thing is supersonic.

Mr. PEARKES: Yes. Mr. Winch asked a definite question about supersonic bombers. The Russians possibly may develop one in the future, but to our knowledge they have no supersonic bombers.

Mr. WINCH: To your knowledge do they have the ICBM.

Mr. PEARKES: We believe they have a limited number of ICBM's and Mr. Khrushchev has stated several times that they are going ahead with the development of their ICBM but that they are not going ahead with the production of their bomber force. Now, whether or not that is true I do not know, but we have no indication that the Russians have supersonic bombers in their air force at the present time.

Mr. SMITH (*Calgary South*): In respect of the missiles, there are United States developments; the first is the Nike Zeus I believe which is the most hopeful as an anti-missile missile. Is this the best possibility of defence against an ICBM.

Mr. PEARKES: There are several devices in respect of which research work is carried out in the United States for defence against the ICBM. The Nike Zeus is the one which is the furthest developed.

Mr. SMITH (*Calgary South*): With regard to warning, would you say a word on the latest system which I believe is the MIDAS?

Mr. PEARKES: Well, the MIDAS detecting system is intended to get warning through the heat generated by the discharge of an intercontinental ballistic missile at the time of the discharge, which would give, at least, another 15 minutes warning.

Mr. SMITH (*Calgary South*): Is the Canadian government being kept informed, day to day, on the advancement of both the Zeus and MIDAS?

Mr. PEARKES: We are kept informed of the up to date development of these two.

The CHAIRMAN: Mr. Hellyer.

Mr. HELLYER: I wonder if the minister would briefly restate the function of NORAD and then, if he will, demonstrate, for the benefit of members of the committee, in respect to the map of North America where, approximately, the various functions take place in respect to bombers alone, at first—and he can do this roughly; he does not have to pinpoint anything on the map—where, approximately, detection would take place; where, approximately, identification would take place, and where it is hoped interception and destruction would take place. In that way, we could have, in logical sequence, the functions of this plan.

Mr. PEARKES: The Dew line would be the first warning of bombers coming in. As you know, the Dew line runs along the northern part. Then, you have the Mid Canada line, which runs roughly along this area here, which I am indicating on the map. As I think everyone knows, the Mid Canada line runs roughly across from Hudson Bay—from Labrador, Hudson bay and across here to approximately Dawson creek in northern British Columbia. The Pinetree line runs south of that. Now, very roughly, the Dew line in the Arctic—what is the latitude of this?

The CHAIRMAN: 55.

Mr. PEARKES: 55. It is 55 here. This runs across mid Canada. The first warning is picked up by the Dew line. Confirmation is received at the Mid Canada line. Then, our radar coverage takes us from the north to the Mid

Canada line. The radar coverage that we have, is from approximately the Queen Charlotte islands on the Pacific to James bay and Labrador.

Mr. HELLYER: That is the detection?

Mr. PEARKES: That is the control line—the Pinetree line.

Mr. HELLYER: So, the Dew line, presumably, detects some advancing bomber, which is unidentified. Then, my next question is this: where and how do you identify it positively as friend or foe?

Mr. PEARKES: The identification would come from the Mid Canada line, confirming the route which is being taken, and the warning given at the Dew line picked up again at the Mid Canada line—and then the identification can follow—the identification from aircraft which have been alerted as soon as the unknown came into our system. So, you might say the general engagement would be just south of the 55th parallel.

Mr. HELLYER: This is my point.

I wonder if the minister would give us a clearer indication of just where and what interceptors would be available at or anywhere near this latitude for purposes of positive identification of planes which were unknown?

Mr. PEARKES: They are Canadian interceptors from North Bay, St. Hubert, Bagotville, Ottawa and Comox. These are squadrons of CF-100's. They would be alerted, as would, also, the interceptors on the United States airfields. There are a considerable number of them distributed along the Canadian-American border, in the northern states.

Mr. HELLYER: Could I read a short quotation from General Kuter, which he gave before the NATO parliamentarians' conference on Wednesday, November 18, 1959. I quote:

We must first know what is present in our air space. Next, we must identify the object as friendly by one of several available methods. Failing in this, we classify the object as "unknown" which necessitates an immediate "scramble" of an interceptor to visually examine the unknown. If the unknown proves to be hostile, then it must be destroyed, and even when we are talking about subsonic aircraft the time available for performing these functions is not very much.

My question comes back to the aircraft that we have to perform these functions, and from what you, yourself, said, on earlier occasions, and from what I think is pretty general knowledge, the CF-100 is not capable of "scrambling" and, in most cases, flying sufficient distances to identify certain types of Russian bombers. We need to have some which could do this. However, ours do not have the reserve and excess speed which would enable them to get to the point of interception, make identification, and give the warning. This is the problem that concerns me. You have said the American interceptors would assist, but the American interceptors, with the exception of those on the periphery, are located below the Canadian-American border—below the 49th parallel. Now, the additional time required for them to take off from those stations and fly all the way north in the direction of the Mid Canada line to make a positive identification would take too much time—and this concerns me. I do not know how you can continue to perform this function without re-equipping your air defence squadrons, or some of them, with supersonic aircraft, which would have the reserve and excess speed.

I would like some information on that.

Mr. SMITH (*Calgary South*); Well, read pages 12 and 13.

Mr. PEARKES: The interceptors on the American stations would be able—and this is an opinion—would be able, in my opinion, to carry out the interception within the radar coverage—that is, by the time they get the

warning here, they would have been alerted, and there would be time for them to carry out an interception by the time the bomber of today had reached the line of the radar coverage, which I have given roughly as coming from the Queen Charlotte islands to James bay.

Mr. HELLYER: Does it not seem inefficient to you that supersonic American aircraft from below the border should have to fly north of the border, north of North Bay, north of the range of the Bomarc, to make a positive identification of friend or foe so all the installations to the south can be effectuated?

Mr. PEARKES: We have not an interceptor which is faster than the CF-100, at the present time.

The CHAIRMAN: It is pretty cheap for Canada.

Mr. HELLYER: I am not so sure about that; it may have disastrous results.

In your opinion, Mr. Minister, would it not be advisable to replace at least some of our air defence squadrons with supersonic aircraft in order to carry out the identification role?

Mr. PEARKES: As I have said, no decision has been reached regarding the replacement for the CF-100.

Mr. SMITH (*Calgary South*): Could I ask you then, in this respect, one must assume that while a decision has not been reached thus far, it is fair to state that you are currently examining the possibilities of providing a suitable interceptor to perform this job. This is axiomatic, is it not?

Mr. PEARKES: That is correct. Examinations have been carried out of various types of interceptors in order to determine whether a replacement is desirable or is available for the CF-100.

The CHAIRMAN: Have you a supplementary question on that?

Mr. CHAMBERS: No.

The CHAIRMAN: Have you a supplementary question, Mr. Baldwin?

Mr. BALDWIN: Mr. Chairman, I have a supplementary question on the statement read by Mr. Hellyer from General Kuter.

I wonder if the minister would confirm the correctness of his interpretation that General Kuter gave to NORAD when he said that NORAD was within the broad military concept of the North Atlantic Treaty Organization?

Mr. PEARKES: That is correct. NORAD is within the broad military concept of the North Atlantic Treaty Organization, because the North Atlantic Treaty Organization set up regional commands for northern Europe, southern Europe, and the Canadian-United States region.

Mr. HELLYER: General Kuter in saying that it came within the broad scope of NATO would lead one to wonder if there is not an inference there that it would work even more efficiently within the NATO structure itself.

Mr. CHAMBERS: Mr. Hellyer spoke of a definition of neutralism. And Mr. James M. Minifie at page 2 of his book entitled *Peacemaker or Power-Monkey: Canada's Role in a Revolutionary World* has this to say:

For Canada and the United States must decide—and in the event, this decision falls on Canada—whether the defence of Canada and the north American continent is forwarded by so close an alliance with the United States than an American general commands Canadian forces in peacetime, through a legal, functioning, military command, without need of further consultation, and with steadily increasing lateral controls.

I make particular reference to those words "without need of further consultation". Does the minister think that is a proper definition of NORAD?

Mr. PEARKES: No American general has command of any Canadian forces in peacetime.



It is true that he might work out exercises, and I referred to one this morning which is under consideration. But if that is developed, it would be a joint exercise. But the plans would have been worked out by the two countries, and would be approved by Canada as well as by the American government. But there is consultation going on, and every plan which is devised by NORAD has the approval at the appropriate level of the Canadian authorities.

Mr. CHAMBERS: Rather than there being an American general commanding Canadian forces, it is a joint command over the forces?

Mr. PEARKES: Yes, there is a joint command in NORAD.

Mr. CHAMBERS: I would like to have the minister comment on one more statement in Mr. Minifie's book at page 20 which reads as follows:

The polar threat has been exaggerated. Canada could meet it alone, by inflicting unacceptable losses on bombers, without the bondage of NORAD.

Would the minister care to make a comment on that?

Mr. PEARKES: I think it is quite inaccurate. We certainly do not have the interceptors or any other means of inflicting such casualties as you are suggesting.

Mr. HELLYER: The statement which the minister just made, that no Canadian troops are under a United States general in peacetime is in direct conflict with the statement of General Kuter in the statement we are referring to, that is, at page 31 of the report, at the bottom of the page, which reads as follows:

I have direct operational control...

Mr. PEARKES: That is a different matter. I said under command.

Mr. HELLYER: What is the difference?

Mr. PEARKES: There is a great deal of difference. For instance, a commander has the right to promote the personnel in his command, and he is responsible for all the administration of his command. But General Kuter has nothing to do with the actual administration, or with what is known in service quarters as a command of any Canadian forces.

Those forces are placed under NORAD where there is a joint command in operation.

Mr. HELLYER: I will not read the rest of this, but I want to ask another question.

The CHAIRMAN: Just a moment. We have only one minute left to go. We can come back to this matter at the next meeting. I rule that you do not continue it right now, because we have only one minute left to go and Mr. Macdonald has not had one word yet.

Mr. MACDONALD (*Kings*): I want to ask a question with regard to NATO control of NORAD. Is it not a fact that under present day warfare time is of the essence, and that if you had an amalgamation of the two commands which would coordinate and control the whole effort, is it not of vital importance that we have a command in North America which could act quickly on the problems here, as well as a command in Europe which could act quickly on the problems which might crop up in that area?

Mr. PEARKES: We must have two separate commands, and there must be liaison between those two commands.

Mr. HELLYER: Why are we going to adjourn now?

The CHAIRMAN: Well, we could keep on if you wish. I thought that we usually adjourned at a quarter to eleven.

Mr. BALDWIN: I have some supplementary questions to ask, too.

The CHAIRMAN: My thought was that we could continue this at our next meeting.

Mr. HELLYER: Could we not keep on now for five minutes more?

The CHAIRMAN: Very well.

Mr. HELLYER: The balance of that quotation reads as follows:

I have direct operational control over all air defense elements of the United States army, the United States navy, the United States air force, and the air defence command of the Royal Canadian Air Force. This authority exists now, and is not dependent on any consultations or a declaration of hostilities.

Mr. BALDWIN: Go ahead and read the next two sentences.

Mr. HELLYER: Very well.

My deputy is a Canadian, Air Marshal C. Roy Slemon, and in my absence he exercises exactly the same authority.

Mr. BALDWIN: And read the next sentence too.

Mr. HELLYER:

NORAD is legally constituted by both nations and reports to two military authorities—the American joint chiefs of staff and the Canadian chiefs of staff committee.

Now, if I might return to my question: first of all, General Kuter said that authority exists now, and it does not depend on a declaration of hostilities. Would the minister indicate if this is correct? And secondly: what is the purpose, or what is the reasoning behind the NORAD command, if it is not, in fact, to give the NORAD commander immediately control over operations in NORAD and of the units assigned to him?

Mr. PEARKES: He has immediate operational control of both forces, Canadian or American; they are placed under his disposal.

Mr. HELLYER: And he can order them into action?

Mr. PEARKES: If there is an attack coming, he can allocate certain forces to deal with those bombers which are coming in from the Atlantic, we will say, and those which are coming in from the Pacific.

Mr. HELLYER: Are they not, then, under his command?

Mr. PEARKES: They are under his operational control. There is a distinct difference between them.

Mr. HELLYER: There seems to be a rather fine distinction.

Mr. SMITH (*Calgary South*): Perhaps Mr. Hellyer should go to the staff college to determine the difference.

Mr. BALDWIN: Mr. Chairman, may I ask one other question?

The CHAIRMAN: You can, if you can do it in one minute.

Mr. BALDWIN: Yes. Here is what General Kuter says on page 29:

The United States and Canadian chiefs of staff, to whom I, as commander in chief, NORAD, report, comprise also the Canada-U.S. regional planning group. This group reports through the standing group NATO to the NATO military committee. We thereby assure that the plans for the defence of north America are in harmony with those of the NATO commands.

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Do you agree with that, Mr. Minister.

Mr. PEARKES: I do.

The CHAIRMAN: Thank you very much. We have had a very interesting meeting. Until next week, gentlemen.

The committee adjourned.



ORDER OF REFERENCE

THURSDAY, June 23, 1960.

*Ordered*,—That the name of Mr. Spencer be substituted for that of Mr. Thompson on the Special Committee on Defence Expenditures.

Attest.

L.-J. RAYMOND,  
*Clerk of the House.*



## MINUTES OF PROCEEDINGS

The Senate, Room 356-S.

TUESDAY, June 28, 1960.

(17)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Halpenny, Hellyer, Lambert, Parizeau, Smith (*Calgary South*), Spencer, Webster, Winch.—(10).

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns.

Mr. Hellyer protested calling the meeting on this day instead of Wednesday as originally scheduled. The Chairman explained that the Steering Subcommittee had so decided in the absence of Mr. Hellyer who was unavoidably absent. The minister had other important engagements on Wednesday.

The Committee resumed from Friday, June 24th, consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61.

Mr. Pearkes was questioned at length, and the Committee completed its study of NORAD.

Some questions were asked of the Minister which he undertook to supply at a later date.

And consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61 still continuing, it was adjourned until the following meeting.

At 10.42 o'clock a.m. the Committee adjourned to the call of the Chair.

Antoine Chassé,  
*Clerk of the Committee.*





## EVIDENCE

TUESDAY, June 28, 1960.

9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum. You will recall that at the last meeting we were considering NORAD as a whole. I anticipate that we should be able to get through with the general questioning on NORAD this morning—at least, I hope so.

Mr. HELLYER: Mr. Chairman, before we commence, I wonder if the committee could have an explanation as to why this meeting was called this morning.

The CHAIRMAN: Yes. We called an emergency meeting of the steering committee this morning, and we tried to get you by phone. The phone was busy, and we found out that you were out of town. Then Mr. Winch, Mr. Fairfield and I decided we should meet this morning, because there are several meetings tomorrow, to which the minister wanted to go, in Ottawa. We did not see any reason why we should not sit.

Mr. HELLYER: I think I must register an objection.

The CHAIRMAN: That is perfectly all right.

Mr. HELLYER: Because it had been agreed at the steering committee meeting last week that we would meet this time on Wednesday afternoon and Thursday morning to accommodate the minister in respect to other plans he had for Friday. I would hope that when we make arrangements we can stick to them, especially at this late stage in the session. It is almost impossible to organize your work and your plans effectively, and this type of last-minute switching these things around adds to confusion.

This morning, for instance, in the banking and commerce committee the board of trade of the city of Toronto are appearing, and I would very much like to be there, and had planned to be there. I would like to suggest that in future when we make plans we try to stick to them, if at all possible, and that last-minute arrangements are not made without very early consultation.

Mr. LAMBERT: On this matter, Mr. Chairman, I think that Mr. Hellyer is rather presuming here. He has spoken of his position in this committee, and personal matters. We are all disturbed by changes in committee meetings: but we have to conform. That is our business. I think these things are better off the record than on the record.

The CHAIRMAN: However, gentlemen, the meeting was called. We had a meeting: you were not there at the time, Mr. Hellyer. It was unfortunate. I know you could not be here. Could we get along with NORAD?

Are there any more general questions on NORAD, or shall we go on item by item?

Mr. HELLYER: Mr. Chairman, if no one else has any questions, I have. I am not at all satisfied with the explanation we have had so far with respect to air defence, and particularly in the air defence against manned bombers.

The theory has been explained to us as to where the various components of the defensive mechanism should be; but in practice we are not following that same principle.

The CHAIRMAN: And your question, Mr. Hellyer, is?

Mr. HELLYER: I would like the minister to explain, again, in greater detail why, when the Bomarc is supposed to be an area defence, following the long-range manned interceptors, it has not been the announced policy of the Canadian government to follow that plan.

Mr. CHAMBERS: What plan?

Mr. LAMBERT: What plan?

Mr. HELLYER: The plan of the defence in depth, that the interceptors come first, then the Bomarc, and then the Niki—

The CHAIRMAN: What is your question: what would you like the minister to do?

Mr. HELLYER: I would like the minister to give any details in as far as the announced policy is concerned that Bomarc is our first line of defence.

The CHAIRMAN: You would like to know why Bomarc is our first line of defence?

Mr. HELLYER: That is correct.

Hon. G. R. PEARKES (*Minister of National Defence*): I do not know that you can define the Bomarc and the interceptors as being a first line and a second line of defence. There are two elements in the defence of the North American continent against the bomber attack, interceptors and the ground-to-air missile; and those are integrated across the continent. Some of those elements are provided by Canada, and some of those elements are provided by the United States.

We have at the moment interceptors in the CF-100 operating from North Bay, Bagotville, St. Hubert, Ottawa and Comox.

They are capable of going a certain distance to the north, so that they can engage interceptors between the mid-Canada line and the Pinetree line. We have Bomarc planned for North Bay and La Macaza. They will be able to engage hostile bombers in the same area.

I do not know that I can say any more than that. In other parts of Canada there will be defence which will be from interceptors and Bomarc stations located in the United States.

Mr. HELLYER: What effect would the Bomarc have against a ballistic missile launched from an aircraft?

Mr. PEARKES: It is capable of engaging an air breathing missile.

Mr. HELLYER: An air breathing missile; but not a ballistic missile launched from an attacking bomber?

Mr. PEARKES: It certainly could not engage an intercontinental ballistic missile.

Mr. HELLYER: But could it engage a ballistic missile launched from an attacking long-range bomber?

Mr. PEARKES: No, it could not engage a ballistic missile launched from a bomber, as far as I know now.

The CHAIRMAN: Could it destroy the bomber, if a bomber launched the missile?

Mr. PEARKES: If a bomber was within range, it could certainly destroy the bomber.

Mr. HELLYER: That is the point, that the chairman has just raised, that the bomber would launch this missile, presumably, before it came within range of the Bomarc. In November—

Mr. PEARKES: We have to pattern our defence against the threat that there is, and it is by no means confirmed that the Russians have in their inventory



ballistic missiles which can be launched from bombers which would be able to hit a likely target on the north American continent from a range outside of the range of the Bomarc.

Mr. HELLYER: Mr. Chairman, that may well be true as of today; but we are talking now with respect to the Bomarc installations of the period in the mid-sixties. Surely the minister does not deny that by the mid-sixties the Russians could have, if they wished to have, a ballistic missile which could be launched from their long-range aircraft?

Mr. PEARKES: It is possible that they may develop one; but as far as I know, no such weapon is in existence or has been developed in Russia as yet.

Mr. HELLYER: I think, however the minister would not wish to leave the impression that because we do not know that they have one now, that we do not anticipate that they could have one by the mid-1960's.

Mr. PEARKES: I doubt very much whether they could have one by 1965.

The CHAIRMAN: Do you have a supplementary question, Mr. Lambert?

Mr. LAMBERT: Yes, right on that point, Mr. Chairman. Is there any defence to any weapon at the moment which is a defence to a ballistic missile?

Mr. PEARKES: There is no defence against the intercontinental ballistic missile at present, except the fear of retaliation. It does not matter whether that ballistic missile is fired from a launcher in Siberia, or fired from a bomber somewhere over the north American continent; there is still the defence of fear of retaliation.

Mr. HELLYER: Mr. Chairman, I would like to refer to the NATO parliamentarians' conference in Washington in November of last year. Senator Wiler of the United States asked General Kuter this question:

Is the Bomarc the answer to the bomber?

and General Kuter replied:

No, sir. There is no single answer to the bomber. The bomber or the air-to-surface missile requires now, will require as far into the future as I can see, the longer range aircraft to force the bomber to use his defensive tactics or to employ his decoys to force him into effective methods of approach and tactics. The Bomarc follows closely behind that long range fighter at very high kill capability, and requires behind it a more intensive defence of the local area. I believe we will always require the family of weapons that gives us all of those technical and tactical advantages.

Returning to the question: If this is the concept which has been held both in Canada and the United States in respect of the north American air defence against bombers, and particularly to engage bombers before they come within range where they can use their air-to-ground missiles, why, then, has the Canadian government not made plans which would enable our sector of NORAD to engage enemy bombers further out?

Mr. PEARKES: The plans we have engage the bombers to the limit of our radar coverage, and that applies all across the north American continent.

You will recall that the long-range interceptor which was planned is the F-108, and the Americans abandoned that. There is no long-range interceptor at the present time in the inventory, as far as I know, of either the Canadian or the American air forces.

Mr. HELLYER: The minister indicates that we are tying ourselves to the concept of the semi-automatic ground environment. Does not the minister think it is a dangerous thing to place complete reliance on a system which could be rendered ineffective from destruction by enemy missiles?

Mr. CHAMBERS: Can you suggest an alternative?

Mr. HELLYER: Sure.

Mr. PEARKES: I was going to say that it is the best system that we know of at the present time.

Mr. HELLYER: Does the minister not feel it would be safer to have some flexibility; in other words, to have some long-range interceptors, or interceptors capable of action independent of ground environments?

Mr. PEARKES: One has to weigh in the balance whether you are going to put a vast sum of money in order to develop a long-range interceptor, which, as I have indicated, is not in the inventory of either the Canadian or the United States forces at the present time, or else put the extra money, or the money which would have been placed to develop and supply a long-range interceptor into increased power of the forces of retaliation.

The ability to be able to strike back seems to be a much stronger deterrent to war than the purely defensive attitude by putting extra money into such weapons as the long-range interceptor.

Mr. HELLYER: If that be the case, then, Mr. Chairman, why did not the minister recommend that the funds of both the United States and Canada, which are to be, he hopes assigned to the Bomarc system, be allocated rather to a strengthening of the offensive and to the making of a more mobile offensive force?

Mr. PEARKES: Because there has to be a proper balance kept between the two. We have strived to reach that at a reasonable balance, and, as you know, the United States are placing a higher proportion of their available funds into the development of the retaliatory forces.

Mr. HELLYER: Does NORAD have plans for weapons which would be of some effect against missiles launched from submarines?

Mr. PEARKES: I have said several times that there is no weapon at present which is capable of destroying a missile which is launched either from a ground launcher, a submarine or an aircraft. The power of defence against those is the fear of retaliation, and retaliation would take place as soon as the missile is launched, whether it is launched from a ground launcher, an aeroplane or a submarine.

The CHAIRMAN: Mr. Lambert?

Mr. LAMBERT: Mr. Chairman, when the minister says "missile", he means a ballistic missile as against a conventional missile?

Mr. PEARKES: Yes, very definitely.

The CHAIRMAN: Mr. Carter?

Mr. CARTER: I would like to go back to the last meeting, when the minister was describing the effects of the blast. I was trying to picture the shape of things to come, if hostilities actually broke out. Assuming that hostilities broke out between Russia and the United States and that intercontinental missiles were used on both sides, would it not be necessary to have a follow-up by land troops to consolidate victory? I mean, would it be necessary for each side to follow up with land troops?

Mr. PEARKES: Not necessarily. One side or the other might gain such a decisive victory that the government of the other side would feel it desirable to sue for peace. I can foresee such devastating destruction delivered to Russia, if Russia had made the first strike, that the government would collapse and that there would be no necessity to have land armies to occupy Russia. It would be a question of rehabilitating those parts of the world which had been destroyed. That is the second phase of the war. It is pretty hard to predict the actual nature of that, but I certainly do not think that land invasion, as we used to know it, with long military operations, is inevitable.

Mr. CARTER: But from what you have described would happen, it only indicates that one side would completely annihilate the other side. With sides evenly matched, we could hardly expect that to happen.

Mr. PEARKES: Well, that is your opinion.

Mr. SMITH (*Calgary South*): Mr. Minister in your statement to us you point out that no decision has yet been reached to re-equip our squadrons as a contributing force to NORAD. Would you be in a position to tell us what are the factors involved in arriving at such a decision, other than economic?

Mr. PEARKES: I made a statement on that, which you will see on page 25 of the printed statement.

Mr. SMITH (*Calgary South*): While I am looking at that—and this is the point of my question—you mentioned also in our last meeting the necessity for testing our air defence. In fact, as I recall it, you actually advocated these checks should be made reasonably frequently, and that they should check the entire system. Is it conceivable that as a result of an overall exercise with respect to the defence of the North American continent, an analysis of this attack exercise could be a contributing factor with regard to determining the Canadian position with respect to these fighter squadrons?

Mr. PEARKES: We would hope to learn a great deal from an exercise such as I suggested, in which the whole of our defence system would be tested.

Mr. SMITH (*Calgary South*): Might I ask, Mr. Minister, through the chair: with regard to these fighter squadrons which will come into play, belonging to the American contribution to NORAD, has any consideration been given to placing these in Canada; or, by the same token, is there any likelihood or probability of SAC squadrons being given any Canadian bases for their operation, other than those presently purely assigned for tanker operations?

Mr. PEARKES: There are no present plans for any SAC bases to be supplied in Canada. No suggestion has been made by the United States, and there are no plans whatever. The possibility of the air defence interceptor squadrons of the United States using or having facilities provided on some Canadian bases has been considered.

Mr. SMITH (*Calgary South*): Again, in this instance, we have not yet come to any conclusion; it is still under consideration?

Mr. PEARKES: It is under consideration, and certain facilities could be provided very easily—that is, special fueling, spare parts, and that sort of thing. I think they are generally referred to as “recovery stations”. The interceptors would leave from United States bases, engage the enemy, and then be able to use Canadian facilities as recovery bases.

Mr. SMITH (*Calgary South*): In this respect, in the course of the last twenty years Canada has had a vast number of airfields, largely built as part of the Commonwealth air training program. Many of these, of course, would be too small for the type of fighters employed today; and, of course, a great many of them have been discarded and have not been maintained for any active use. I wonder if the Minister, however, would express his opinion on the necessity for maintaining, over and above our present operational bases, some of these fields which, in the event of Americans being given the right to use Canadian fields, should perhaps become part of the Canadian air defence system? I am referring more specifically, Mr. Minister, to those fields which have been used as part of the NATO training program and which still are in pretty good shape, for the most part.

Mr. PEARKES: My understanding is that some of those fields are being maintained as alternative bases.

Mr. SMITH (*Calgary South*): I wonder if, for a future meeting, it would be possible to have your officials provide us with actually which fields are being maintained for that purpose?



Mr. PEARKES: Yes, we can get that.

The CHAIRMAN: Mr. Hellyer?

Mr. HELLYER: Mr. Chairman, it seems to me incredibly inefficient that the main line fighters of the North American air defence command would be stationed to the south of what you might call the first line of engagement. It seems to me—

Mr. SMITH (*Calgary South*): It seems to me you should ask a question.

Mr. HELLYER: If you will be patient, I shall.

It is like your having a life-saving station inland and, at the shore, recovery stations where they can collapse, having made a long dash to the sea and hoping they are not too late.

The CHAIRMAN: You have made your statement; now your question, Mr. Hellyer?

Mr. HELLYER: Why should not the interceptors—be they Canadian or American—which are the first line of North American air defence against manned bombers be stationed closest to the expected point of arrival of any possible enemy?

The CHAIRMAN: It seems to me that was answered last week; but go ahead, Mr. Minister.

Mr. PEARKES: The reason is they can operate within the radar coverage. Warning is obtained from the DEW line, and long before the bombers could reach the area of radar coverage the interceptors would have taken off and would be cruising to a point, say, near the limit of the radar coverage; so that when the bombers came within the radar coverage, the interceptors could be directed to them at the limit, or just about the limit of the radar coverage.

Mr. HELLYER: Was it intended the F-108 should operate with its own radar, independent of ground environment?

Mr. PEARKES: That was the concept of the 108.

Mr. HELLYER: It would be able to meet the enemy before they came within the ground environment?

Mr. PEARKES: Yes, that was the concept of the 108, as far as I know.

Mr. HELLYER: Mr. Chairman, it has been stated the main purpose of North American air defence is to defend the deterrent. I wonder if the minister would explain not only what is meant by that but also the mechanics by which it would operate, and what you might anticipate would happen in case of attack?

Mr. PEARKES: You are asking me to look into my crystal ball a great deal, in saying what I could anticipate would happen.

If there was an attack by bombers, or with the few missiles which the Russians may now have, I would imagine that the main attack, in the first instance, would be directly against the SAC bases, be they bomber bases or missile bases. As soon as the warning was given, I imagine many of the SAC bombers would leave the ground and possibly proceed in the direction of the targets to which they had been assigned. They can always be called back, as you know, once they have started. The defence would come into action against the bombers, hoping to destroy as large a proportion of the bombers as they could. In the meantime, if the Russian bombers continued and started using nuclear weapons, I imagine all the retaliatory forces, wherever they may be, would go into operation against targets in Russia.

Mr. HELLYER: Assuming this was the real attack and—as many military scientists have predicted—the Russians used, first, their long-range inter-continental ballistic missiles for the purpose of knocking out, on the ground, as much of the retaliatory capacity of the United States as possible; then

all the SAC bombers which were in the air or which you were in a position to get in the air at the time of the warning would do so, and the retaliatory offensive would be launched immediately. What, then, would be left for protection by the North American air defence command?

Mr. PEARKES: The air defence units of NORAD.

Mr. HELLYER: There are only air defence units?

The CHAIRMAN: They are separate groups?

Mr. PEARKES: SAC and NORAD are separate commands.

Mr. HELLYER: What elements of the retaliatory capacity? Presumably, there might be some bombers on the ground whose pilots were not immediately available. If they had protection for a few hours, till such time as the pilots could be recalled, this would be an element of retaliatory capacity which might be protected long enough to get them into the air. Is there anything else which could obtain protection and any cover from the North American air defence command?

Mr. CHAMBERS: North America!

Mr. PEARKES: I really do not understand what you are driving at.

Mr. HELLYER: I admit it is difficult, Mr. Chairman, but this concept of protecting the deterrent was one which was dreamed up before the intercontinental ballistic missile became operational. At that time it was very simple, because at that time it might be three, four or five hours from the time notice of an attack was first given till the time the Russian bombers were over their United States targets. There was this time gap, and any Russian planes which could be knocked out would make it possible for the United States to launch a greater part of their retaliatory capacity. In that respect the North American air defence was part of the effective deterrent.

As it shifts to missiles and the reaction time is reduced, the picture becomes more complicated. If the Russians then had several intercontinental ballistic missiles to launch against all major retaliatory bases—such as SAC bases and missile bases—in the United States, the only part of the retaliatory capacity of the United States which would be effective is that which could be put in the air or launched immediately. This raises the question of what the effective functions of the air defence are, after that state has been arrived at?

Mr. PEARKES: I think the effective function of the air defence is part of the deterrent; that it will let the Russians know that if there is a bomber attack they must anticipate having to pay a heavy cost for the use of their bombers.

Mr. HELLYER: This is a different concept from that of the protection of part of the U.S. retaliatory capacity, which is what used to be given as the reason for expenditures in air defence?

The CHAIRMAN: Your question? You say this—

Mr. HELLYER: There is a question mark at the end.

The CHAIRMAN: Can you answer that statement as though it was put in the form of a question, Mr. Minister?

Mr. PEARKES: "Is there a different concept?" I do not think this is a different concept. There has always been the thought that if it can be shown that the Russian attack, before it takes place, would be a very costly one and would not achieve the results which the Russians wanted—why, then, it would be a deterrent, part of the deterrent. It is showing the Russians that it is not really worthwhile doing this—"You will not be able to knock out all these missile bases, all the SAC bomber bases." You must realize there are many alternative fields from which SAC bombers could operate, even in the United States.

Mr. HELLYER: I do realize that, Mr. Chairman, but the question really is, whereas a few years ago, or even today, some part of the retaliatory capacity might have several hours in which to become airborne, as the Russian missile inventory increases to the mid-sixties, presumably a very large proportion of the retaliatory capacity would not have more than this 10 to 15 minute reaction time in which to become air borne, and this poses another question as to what actual protection air defence would provide at that time.

Mr. CHAMBERS: Are you assuming there would be no bomber attack?

Mr. HELLYER: No, but I am assuming there would be no retaliatory forces left.

Mr. PEARKES: The retaliatory forces of the United States are improving all the time. You are talking of five or six years from now. But at the present time there is not that strength of Russian missiles.

In five or six years time advances will have been made by the United States, and with more advanced types of missiles, such as the Minuteman, which would have a great deal of flexibility, and which would move from one place to another, and which could be fired from railway cars. Then there would have been developed, the chance of Russia destroying all the territorial bases in the United States decreases very rapidly.

Mr. SMITH (*Calgary South*): With respect to retaliatory forces, Mr. Minister, General Powers, commander of SAC argued on the necessity for some time of what he described as an airborne alert. Are you able to tell us whether he was able to convince the Senate that it was a necessary part of the deterrents, to maintain forces consistently in the air as a deterrent? This is relative to the question in the sense that these aircraft would not otherwise have been required to be kept airborne.

The CHAIRMAN: Has it been decided yet?

Mr. PEARKES: I think we are wandering afield, a long way from these estimates. We are talking about what Canada is going to do.

Mr. SMITH (*Calgary South*): You are quite right, but I submit it is relevant to the last question. But, very well, if you prefer not to answer, it is all right.

The CHAIRMAN: Before you do, might I say that we are repeating a lot of questions which were asked before, and we are getting the same answers. I suggest we get over this as quickly as possible and get on to the estimates.

Mr. HELLYER: That is right, but the answers were unsatisfactory before.

Mr. PEARKES: It would be a very expensive operation, and I do not believe any firm decision has been reached by the United States that a percentage of their bombers will always be in the air.

Mr. LAMBERT: Was it not assumed that one of the prime purposes of NORAD was protection or deterrence? But in addition, there are other factors. There are other reasons for it. There are other reasons for its existence. And my point is this: would the minister be satisfied that those same reasons would exist in four or five years time in general, such as protection of major industry from bomber attack?

Mr. PEARKES: Yes, and I can only repeat what I have said so many times: that, as the missile element increases, the bomber threat is bound to decrease.

Now, so long as there are bombers in the Russian inventory, we feel that they may use them. Therefore we have to provide defences against them. I refer to SAC bases or industrial centres.

Mr. LAMBERT: Are we to assume or to feel, from Mr. Hellyer's proposition, that the only reason at the time for NORAD was its function in acting as a deterrent?



Mr. PEARKES: No. Deterrence is our main defence; that is, the fear to strike back. But there is also a degree of defence to be given to the industrial targets which might be attacked by enemy bombers, should the deterrent fail.

Mr. SMITH (*Calgary South*): Mr. Minister, if you consider that my previous question was not relevant—I believe it was—let me go on to another question: how would the defence planners, with respect to the Canadian air defence forces determine the number of squadrons, and the number of aircraft per squadron, which are necessary with respect to the defence forces of Canada? Are they basically determined by ground environment? Do they control the number of fighters? Otherwise you have so much ground environment, and this is the basis on which you arrive at the actual total number of aircraft within the role of this ground environment?

Mr. PEARKES: Yes, that would be one factor; but there is also the economic factor of how much defence policy are you going to place, or can you afford to place, in the interceptors?

Mr. SMITH (*Calgary South*): Is it conceivable, Mr. Minister, that in any proposed plan to change the Canadian contribution, that this pattern based on the type of possible aircraft that might be utilized, that we would also change the location of the squadron bases and the number of aircraft that would be used?

Mr. PEARKES: If a decision were taken to replace the CF-100 by a different type of aircraft, it is quite possible that the number of aircraft per squadron, and the number of squadrons, and even the location of the squadrons—it might be desirable to change them.

Mr. SMITH (*Calgary South*): Can you tell me whether or not the rules of engagement in NORAD have altered since you last gave a statement on this subject before the estimates committee two years ago?

Mr. PEARKES: I do not think there have been any material changes. No, there have been no material changes.

The CHAIRMAN: Cannot this general section on NORAD be carried, so that we may get on to the estimates?

Mr. CARTER: I have two questions. In the event that Russia decided to follow up a nuclear attack on the United States with airborne troops, would Canada not be the logical staging area? And my second question is: what consideration is NORAD giving to this contingency?

Mr. PEARKES: We do not consider it likely that there would be any large body of airborne troops used against this continent. We do consider the possibility of something in the nature of commando raids.

The CHAIRMAN: May the general section on NORAD carry, gentlemen?

Mr. HELLYER: Before it does: there have been estimates made recently that by the expenditure of a sizeable, but not an impossible, amount of money in the United States—and the same would apply presumably to Canada—that the hope of keeping alive, in the event of an all-out attack, a large number of people could be saved—in other words, that by spending sufficient to supply the necessary amount of fall-out and space shelters, that depending on the level of expenditure in this line, the saving of human life in the United States, for example, could be increased up to 80 million people?

Now, if that is true, and certainly emphasis in the last few months has been heading more towards an adequate protection in respect to fall-out, in the opinion of the minister, would a dollar spent on shelters against blast and fall-out for Canadians preserve more life, and more of our capacity to survive attack, and to recover subsequently to attack, than a dollar spent on air defence?

Mr. PEARKES: Oh, I think it is impossible to get down to a comparison of that nature. I think you have to have a balance again. You have to have air defence; and I am certain that shelters would save a great many lives if an attack were launched; and the fact that there are shelters, be they large or small, or just of a family type, it all shows to the Russians that their attack will not be completely successful, and that we will be able to survive.

Mr. CHAMBERS: Is it not true that in your policy, that the minister has been outlining here, that the place of deterrent is one of the preventions of war? And that if this strategy or policy should fail, and war arrived, then whatever we have in the way of shelters would be a tremendous benefit? And therefore our first thought in the interests of defence policy must be in this area of deterrents, in order to prevent war, and to prevent destruction of our cities and people?

Mr. PEARKES: That is absolutely correct. I still think it is prudent that some action be taken in case deterrents fail. All these weapons we have for defence will in effect fail the moment they are used. They are used for their deterrent factors, and if we have to use the Bomarc or other interceptors, then they have failed, because they have failed to deter the enemy.

Mr. HELLYER: That position was very well stated by General Kuter, and I think his remarks are worth putting on the record at this time. They read as follows:

While a massive offence force is certainly a rational deterrent to war, there are any number of irrational causes which could precipitate conflict. Once war has begun, granted equal offensive capability, then I think the balance must swing in favour of the side with the better defence.

For in a total war situation it is only an air defense which can limit national destruction to a point from which recovery is possible. Somewhere in this destructive process a nation can reach a point of no return. It is the business of air defence to insure that that point is never reached.

Obviously General Kuter is using this to strengthen his case for further expenditures and for several years in respect to the forces under his command.

I have two questions: Do you agree that part of air defence is to preserve as large a proportion of the potential of our continent as possible? And secondly, if so, do you then agree that this business of shelters, which is another way of providing survival both of people and of recovery capacity, would fall within your compass and within that of north American air defense?

Mr. PEARKES: Yes. Under our first arrangement the provision of shelters is part of the emergency measures operation.

Mr. HELLYER: Do you not feel that directly related to the business of recovery and survival operations it should be your direct responsibility to try to maintain a balance in respect to the responsibility for plans between air defence, survival, and other shelters?

Mr. PEARKES: There are a good many other forms of government which come into it. There are other federal departments which are concerned. There are provincial and municipal governments, each of which has its responsibility.

In my opinion, the householder, the head of the family, also has a certain responsibility.

We have set up an organization which is known as the emergency measures organization which is coordinating all these various activities. And as far as the Department of National Defence is concerned, it is giving all the assistance

it possibly can to the public, and to help with the planning of all these various projects. But I do not think that the Department of National Defence should assume full responsibility of providing shelters.

Mr. HELLYER: The householder to a large extent looks to the government for guidance, particularly when such a large proportion of his income is drained off for governmental purposes. Do you not think that it might not be advisable to grant, let us say, some measure of tax relief in respect to fall-out shelters, if, in your opinion, they are proper expenditures within this field?

Mr. PEARKES: As far as tax relief for the construction of home shelters is concerned, careful consideration was given to it, and it might be that the municipality was in a position to do it; but that is a provincial matter, or a municipal matter.

As far as the federal government is concerned, we might feel that if you constructed a shelter, perhaps you might get relief from that for income tax purposes but then, that would be a very unfair way of giving such relief.

We have made provision whereby the construction of a shelter can be considered as an improvement under the National Housing Act.

The CHAIRMAN: Might I suggest that if you will look at page 265 you will see that we are going back and asking for answers to the same questions all over again.

Mr. HELLYER: I have only two more questions.

The CHAIRMAN: Very well.

Mr. HELLYER: I am sure that the hard-pressed municipalities would not think that they could give up any part of their revenues for the purpose of assisting in the construction of shelters. Surely, Mr. Minister, the business of national survival and capacity to recover and to rebuild in the case of all-out war is a federal responsibility and, as such, it would fall, presumably, within your competence?

Mr. PEARKES: That is a statement, is it not?

The CHAIRMAN: Yes, that is a statement. There is no question.

Mr. HELLYER: I ask the minister if he agrees with it.

Mr. PEARKES: Well, it just is not—I do not agree with it.

The CHAIRMAN: That is your answer.

Mr. HELLYER: You do not agree that the business of survival, and the ability to rebuild is a federal responsibility?

Mr. PEARKES: It is not solely, under our present form of government, the responsibility of the Department of National Defence.

Mr. HELLYER: But you do agree that it is a federal responsibility?

Mr. PEARKES: No, I do not agree that it is a federal responsibility.

The CHAIRMAN: That was all explained the other day. We were talking about survival before. Have we any original questions, now? If not, may the item not carry, and let us get on with the estimates?

Mr. SMITH (*Calgary South*): I have a number of questions which I would be happy to take up under the estimates, assuming that we can get back to the principle of NORAD. There is no need to rush this statement.

The CHAIRMAN: By all means.

Mr. CARTER: My first question is probably not a new one.

The CHAIRMAN: Then why repeat it?

Mr. CARTER: It is supplementary. If the minister can do so without divulging information, would he care to repeat his reference to commando raids?



Mr. PEARKES: In reference to what?

Mr. CARTER: Commando raids. You said that we did expect commando raids, I understand. Is that what you said?

Mr. PEARKES: Commando raids, yes.

Mr. CARTER: Could you elaborate on that. Are they envisaged as coming by air, or by sea, or by both?

Mr. PEARKES: They might come from a submarine; they might be dropped by parachute: I do not know. I do not say we anticipate them; but we consider that they are a possibility. I do not know whether a Russian ship could get in here.

Mr. CARTER: Let me ask this. This is a new question, Mr. Chairman.

The CHAIRMAN: Good.

Mr. CARTER: Are the three brigade groups in Canada fully equipped to undertake offensive operations in the Canadian Arctic, should the Soviet Union make armed reconnaissance there?

Mr. PEARKES: Yes. In each brigade group we have personnel who are trained as parachutists, who have had experience in operating in the Arctic regions of their own particular area; that is, in the eastern Arctic, the central Arctic, or the western Arctic. Those are completely trained elements within the brigade groups.

Mr. CARTER: Could the minister say how these brigade groups would be transported to trouble spots, and how they would be supplied and maintained?

Mr. PEARKES: I did not say the whole brigade group would be going, although it might be necessary, I suppose, for the whole brigade group to go. If so, they would have to be maintained either with provisions they had taken for a short time, or they would have to be supported by air or other means.

Mr. CARTER: Do we have the means of transporting the brigade group to a trouble spot in the Arctic; and do we have the means of supplying them, transporting them and keeping them in combat condition—that is what I am getting at?

Mr. PEARKES: We have not got the means of taking the brigade group in one air lift to the Arctic; but we have the means of taking those elements which are specially trained for Arctic warfare against the commando type of raid.

We hardly visualize the employment of a brigade group in the Arctic.

The CHAIRMAN: Does the general item carry?

Mr. HELLYER: I have two general questions before it carries, Mr. Chairman. With respect to the north American air defence command, does the minister feel that Canada is paying its fair share of the total cost?

Mr. PEARKES: Yes, I do.

Mr. HELLYER: Does the minister also agree that sovereignty is maintained by a nation more or less in direct proportion to its capacity and willingness to pay its fair share?

Mr. PEARKES: No; I think sovereignty is sovereignty, and that our sovereignty is maintained as long as we are a sovereign state. We are a sovereign state, and nobody has challenged our sovereignty.

Mr. HELLYER: Mr. Chairman, I think this opens up too broad a field—

The CHAIRMAN: I think it does too. Does the section carry?

Mr. HELLYER: There are quite a few questions I would like to ask, following that.

The CHAIRMAN: Possibly when we get down to the item—

Mr. CHAMBERS: There is no item on sovereignty, Mr. Chairman.

The CHAIRMAN: No. I was going to suggest that after the session is all over we all get together and have a picnic and ask questions then.

Mr. PEARKES: I think you will find an item tucked away somewhere for the provision of flags.

The CHAIRMAN: Should we go on item by item? It is 25 minutes to 11. Do you want to hold off the questioning on item by item until the next meeting, and start then, or do you want to start right now?

Mr. WEBSTER: I think we had better hold it off until next week, and go right through the whole thing.

Mr. LAMBERT: Mr. Chairman, item No. 1 will remain open?

The CHAIRMAN: Item No. 1 will remain open.

Mr. LAMBERT: Then let us get started.

Mr. WINCH: Mr. Chairman, may I ask, under item No. 1, questions on recruiting policy?

Mr. PEARKES: On recruiting, I would suggest that questions be asked under the particular service—navy, army or air force.

Mr. WINCH: No; I want it on the whole policy of recruiting, not on individual items.

Mr. PEARKES: I think it would be perfectly in order to ask it under item No. 1.

Mr. WINCH: Could I ask, in these present estimates, what is the total amount on all services for recruiting?

The CHAIRMAN: The total cost?

Mr. WINCH: Yes, in the present estimates.

Mr. PEARKES: We will have to get that, because it would be under the different items.

I may say right now that I consider our costs of recruiting are too high, and I have had for some time an examination being made to see how we can reduce these costs of recruiting.

Mr. WINCH: That is the reason I want to know if we could have a very brief discussion on that, because we have to decide whether we are going to pass, or not pass, the estimates; and I notice that according to a reply which the minister gave recently in order for return, in 1959-60 the total of the three services, for recruiting, was \$5,505,865 for an enrolment of 12,782 recruits. That strikes me as positively amazing.

The CHAIRMAN: Will it be satisfactory if the minister brings the answer to the next meeting?

Mr. WINCH: And a report. Also, I would like to have a little information on recruiting, on which I think there is a rather amazing situation. Although there were 12,782 enrolled, there were 42,559 rejected.

Mr. LAMBERT: That is a reflection on the physique of the nation.

Mr. WINCH: That is what I want to know.

Mr. PEARKES: The main reason for that is that we have a high standard of personnel in all our services. We are anxious to obtain personnel who will, in the main, be capable of being trained for technicians and that type of trade.

Mr. SMITH (*Calgary South*): Are you satisfied with your present strength, Mr. Minister?

Mr. PEARKES: We are satisfied with our present strength: we are up to our ceiling.

Mr. SMITH (*Calgary South*): In all three services?

Mr. PEARKES: Of course, the turn-over is very considerable each year, and we desire to get high-class men into the services. I must say that the standard of the young Canadian who is joining the services and who is in the services now is excellent. I am very satisfied with the type of man we have in the services.

Mr. SMITH (*Calgary South*): But you are not satisfied with the turn-over: you say it is a high turn-over?

Mr. PEARKES: It is a high turn-over; but a high turn-over is desirable too, because if you keep people in too long, then you get an old army. These young men who have done three years in the service, go out, and I am sure they are better Canadians for having done the service. They have had a wonderful education in the service. Many of them go out and are able to take positions in trade which they have learned in the services. But it is too expensive. And then we do have to have selective recruiting.

Those figures would show the number of personnel who had not got the necessary educational standard; those who are not likely to make good servicemen in the particular trade of enlistment that they were asking for. There would also be those who were medically unfit.

Mr. WINCH: Before passing the estimate, Mr. Chairman, as is, or reduction, the main point I am after is what information we can get from the minister on his view of the fact that we are spending \$431 recruiting for each enrolment. To me that seems an amazing amount.

The CHAIRMAN: I suggest we go through under the headings of inspection services, navy, army, D.R.B., et cetera, et cetera. There might be other total over-all costs which you might want.

Mr. Winch wants information on recruiting, and now would be a good time to ask if there are any other questions on this, and at further meetings perhaps that can be provided.

Mr. PEARKES: We will provide a full picture on recruiting.

The CHAIRMAN: Are there any further requests?

Mr. LAMBERT: Mr. Chairman, I am particularly interested in certain technical staff on the strength of the Department of National Defence—architects and civil engineers, and involving with the architects the draftsmen and their staffs.

The CHAIRMAN: We will get that information at a future meeting.

Mr. LAMBERT: What do you consider to be your structural architects? I am not interested in the naval, ship architects; but I am concerned with the building architects, engineers and their staffs.

The CHAIRMAN: That information will be supplied at the next meeting.

Mr. WINCH: At a future meeting, Mr. Chairman, I would like to have a breakdown—

Mr. LAMBERT: I would like that information, Mr. Chairman, if it is feasible and within reason.

Mr. PEARKES: May we ascertain what actual information is required? You want the numbers, or the jobs that they do?

Mr. LAMBERT: The numbers are listed here, in so far as architects are concerned; but I would like to know, in the same way that it is estimated, what is the cost of these people.

The CHAIRMAN: For their staffs, and everything?



Mr. LAMBERT: Yes.

Mr. PEARKES: We will get that.

Mr. LAMBERT: If it is within reason. Let us not put 10 men on for 10 days to get this.

Mr. WINCH: For future meetings, Mr. Chairman, I would like to have, as far as is possible, a breakdown of the allocation of money for the types of research which are to be undertaken by the defence research board—at a cost, on these estimates, of nearly \$24 million.

The CHAIRMAN: When we get to the defence research board, we will have that.

Mr. WINCH: I am just asking for the information now.

Mr. PEARKES: We will have the chief scientist, or controller from D.R.B., who will give you that information.

The CHAIRMAN: Is there any other point?

Mr. HELLYER: In respect to the headquarters staff, we should have a brief statement as to the extent of the reductions in staff; the cost since last year.

Mr. PEARKES: Yes; I think that is shown here.

The CHAIRMAN: Is there any other information you will require, gentlemen? Then may I suggest that we adjourn, and meet again on Thursday morning at 9:30. The room will be announced later.

Mr. SMITH (*Calgary South*): Mr. Chairman, I will have a further question on recruiting at the next meeting.

The CHAIRMAN: By all means: we will open that up.

The committee adjourned.



## MINUTES OF PROCEEDINGS

The Senate, Room 356-S.

THURSDAY, June 30, 1960.

(18)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Halpenny, Hellyer, Lambert, Macdonald (*Kings*), Morton, Smith (*Calgary South*), Spencer, Webster, Winch—11.

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns; Mr. P. S. Conroy, Controller General, Inspection Services.

The Chairman read the Report of the Subcommittee on Agenda and Procedure as follows:

Tuesday, June 28, 1960.

The Subcommittee on Agenda and Procedure (Steering Committee) met at 2.30 p.m. with the Honourable Howard Green, Secretary of State for External Affairs.

*Members present:* Mr. Halpenny, Chairman; Hon. Paul Hellyer, and Messrs. Smith (*Calgary South*), Lambert, Winch, and Mr. Spencer, as observer.

In view of the Minister's statement that his Department have not carried out any negotiations for the use or storing of nuclear weapons, other than that involving the pending discussions related to Harmon and Goose Bay, the Steering Committee therefore recommends that the Minister be not called before the general committee.

Respectfully submitted,

G. E. HALPENNY,

*Chairman.*

Mr. Smith (*Calgary South*) moved, seconded by Mr. Winch, that the said Report be adopted.

After discussion, and the question having been put thereon, the proposed motion of Mr. Smith (*Calgary South*) was, on a show of hands, resolved in the affirmative on the following division: Yeas, 8; Nays, 2.

The Committee resumed from Tuesday, June 28th, consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61.

It was agreed that Item 217 of the Estimates be left open for reconsideration at a later date.

Mr. Pearkes, Mr. Armstrong and Mr. Conroy were questioned.

Items 218 and 219 were approved.



And consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61 still continuing, it was adjourned until the following meeting.

At 10.45 o'clock a.m. the Committee adjourned to meet again at 3.30 o'clock p.m. Wednesday, July 6th.

Antoine Chassé,  
*Clerk of the Committee.*

## EVIDENCE

THURSDAY, June 30, 1960.

9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Gentlemen, on Tuesday, June 28, 1960, the subcommittee on agenda and procedure met at 2.30 p.m. with the Hon. Howard Green, Secretary of State for External Affairs.

*Members present:* Mr. Halpenny, *Chairman*; Hon. Paul Hellyer, and Messrs. Smith (*Calgary South*), Lambert, Winch, and Mr. Spencer, as observer.

In view of the minister's statement that his department have not carried out any negotiations for the use or storing of nuclear weapons, other than that involving the pending discussions related to Harmon and Goose Bay, the steering committee therefore recommends that the minister be not called before the general committee.

The Chair will entertain a motion on this.

Mr. SMITH (*Calgary South*): Mr. Chairman, having moved the steering committee recommendation, I would be happy to move that it be accepted by the committee.

Mr. HELLYER: Mr. Chairman, in the minister's statement—

The CHAIRMAN: Is this discussion on the motion?

Mr. HELLYER: Yes—which you have just read to the committee, it is stated that no negotiations have been and, presumably, are being carried on with the United States in respect to the use or storage in Canada of nuclear warheads, except in respect of United States leased bases in Newfoundland. This, Mr. Chairman, is not in accord with other statements made on the record and, as briefly as I can, I would like to state the reasons for that opinion.

On February 20, 1959, the Prime Minister stated in the House of Commons—and I quote from page 1223 of *Hansard* of that date:

The full potential of these defensive weapons is achieved only when they are armed with nuclear warheads. The government is, therefore, examining with the United States government questions connected with the acquisition of nuclear warheads for Bomarc and other defensive weapons for use by the Canadian forces in Canada, and the storage of warheads in Canada. Problems connected with the arming of the Canadian brigade in Europe with short range nuclear weapons for NATO's defence tasks are also being studied.

We are confident that we shall be able to reach formal agreement with the United States on appropriate means to serve the common objective.

Mr. Chairman, I would like to underline that final sentence.

We are confident that we shall be able to reach formal agreement with the United States on appropriate means to serve the common objective.

Now, obviously, Mr. Chairman, you cannot conclude an agreement based on negotiations which have not yet been commenced.

A year later, the Prime Minister stated, in the House of Commons that the government does not anticipate concluding a formal agreement with the

United States government on the acquisition of nuclear warheads in the immediate future. Again, Mr. Chairman, a clear indication that negotiations between the two governments, at the governmental level—

The CHAIRMAN: Or discussions.

Mr. HELLYER: "Negotiations" is the word used throughout in the record—were being carried on.

Now, the Minister of National Defence was even more definite. Speaking in the House of Commons on July 2, 1959, at page 5393 of *Hansard*, he is quoted as saying:

On February 20 of this year, during the debate which took place at that time, the Prime Minister announced that as far as our troops in Europe were concerned and as far as our air force and troops in Canada were concerned, we were entering into a series of negotiations with the United States in order to arrange the details of the storing of and equipping our forces with nuclear weapons as and when they would be available and as and when we would have the weapons to launch them. By the time we get the Bomarc and by the time we get the Lacrosse over to the brigade and by the time we get the new aircraft for the air division, I am confident that these programs will be completed. Progress is being made with them and as soon as negotiations are completed an announcement will be made and it will be made in this house if the house is sitting at that time.

Again, Mr. Chairman, may I underline the final sentence:

Progress is being made with them and as soon as negotiations—  
—mark the word "negotiations"—

—are completed, an announcement will be made and it will be made in this house if the house is sitting at that time.

Later, the same day, the Minister of National Defence said this:

If the hon. gentleman wishes me to answer that point now, I would say that since these negotiations have not been completed it is impossible to give the details to the committee.

Again, Mr. Chairman, a clear indication that negotiations were being carried on.

Now, the Prime Minister has said that for these weapons—the Bomarc, the ground-to-ground missile and the CF-104—to reach their full potential, they must be armed with nuclear warheads.

Also, he said that negotiations with the United States were under way.

The Minister of National Defence has told us, referring to nuclear power that, of course, it is government policy that Canadian troops should be armed as efficiently and as effectively as are the troops with which they are cooperating. Presumably, this would apply equally to NORAD as well as NATO participation.

Then, he went on to say, as I read:

Progress is being made with them and as soon as negotiations are completed an announcement will be made...

Today, we have a statement from the Secretary of State for External Affairs to the effect that there are no negotiations being carried on, and that there have been none, regarding the use and storage in Canada of nuclear warheads, except by American forces on these leased bases in Newfoundland.



Mr. Chairman, here is an obvious and, perhaps, ominous conflict of statements between ministers of the crown. Somebody is not telling the truth in this committee and the Canadian people are entitled to know what the facts are. It may be possible that negotiations were being carried on and have now broken off, due to a change in Canadian government thinking. But, in my opinion at least, it is most urgent that we get to the bottom of this matter. We are being asked here to proceed with expenditures which will result, ultimately, in commitments for hundreds of million of dollars for weapons which, according to both the Prime Minister and the Minister of National Defence, only reach their full potential if and when armed with atomic war-heads.

The government may have hoped that success at the summit and at the disarmament talks would spare them the painful reality of making a decision, but they may have been naive in so thinking. However, their indecision can be tolerated no longer, and we would be derelict in our responsibility if we did not call the Secretary of State for External Affairs in order to try to square this whole matter.

The CHAIRMAN: It is a very good statement.

Mr. SMITH (*Calgary South*): First of all, I would like to disagree with you, Mr. Chairman, when you say it is a very good statement. It is full of the usual unfounded charges and based completely on misrepresentation of facts.

This committee, as you recall, in the minute that was accepted, was asked to approach the Secretary of State for External Affairs to determine if he, in his capacity as Secretary of State for External Affairs, had entered into any negotiations with the Americans for the use or storing of nuclear weapons. We had from him the clear statement that other than the two references contained in the resolution of the steering committee, he had not, as Secretary of State for External Affairs, undertaken any negotiations with the Americans.

Mr. Hellyer seems to question the authenticity of this statement or, at least, that is the inference he leaves.

In all the discussions we have had in this committee—at least, in reading all the evidence in relation to this problem either in *Hansard*, or the evidence of this committee—it has not been denied that the possibility exists that there may have, and probably have been, some discussion on the use of nuclear weapons to be employed with Canadian weapons. That is understandable. I am not attempting to split any hairs, when I say there is a difference between service discussions at service level and diplomatic negotiations which involve the exchange of notes. But, there is that difference. As an example, we even have today, at the service level, discussions with respect to a possible re-equipping of Canadian squadrons; but this does not mean that it has reached the stage where active consideration has been given to it by cabinet. It may mean this, but I point out these are two methods by which (a) a discussion may be carried out and, (b) a final agreement concurred in.

This committee was asked to interview the Secretary of State for External Affairs, in his capacity as such. This was done, and we have a clear statement on the record to the effect that he has carried out no negotiations with the Americans. However, this does not preclude the committee from further examining the Secretary of State for External Affairs in relation to what may have taken place at the service level, but we have carried out the full responsibility and intent of the resolution of the steering committee, and I suggest the remarks of Mr. Hellyer are completely out of order.

The CHAIRMAN: Mr. Winch?

Mr. WINCH: Mr. Chairman, I would like to make my position clear, as I view it.

As you know, I was at the steering committee meeting, and I think, also, you will agree that I asked a series of questions of the minister. The purport of my questioning was to obtain, from the Secretary of State for External Affairs, the fullest possible information relating to any negotiations, as far as his department was concerned, with the United States, on the use or the storing, in Canada, of nuclear warheads.

As you will recall, sir, I persisted in that line of questioning, because I wanted to have a clear understanding from the minister as to his position as Secretary of State for External Affairs.

The Secretary of State for External Affairs did make it definite, and reiterated time after time, that as far as he was concerned, or his department was concerned, within his knowledge there were no negotiations with the United States of any kind whatsoever, except the two which have been mentioned.

The Secretary of State for External Affairs was present when this report to the committee was drafted, so he knew the exact wording of it. He would realize that the information the committee would receive, as far as he was concerned, would be the identical information that the steering committee received. Now, in view of the fact that the committee now has, exactly as if he was here, the very definite statement of the minister, I take the view, that as far as I am concerned this committee is not political and I am not interested in trying to pit one minister's statement against another minister's statement. As far as Mr. Green is concerned, I do not see what additional information he can give us in respect of his ministerial responsibilities and department is concerned, but this in no way stops us now from insisting on getting an understanding as to what is meant by the statements that have been made, and which have been very aptly quoted directly from *Hansard* by the Minister of National Defence, and by the Prime Minister. I think we should have a very clear understanding in respect of the statements that have been made in this committee at the last two or three meetings, in particular in regard to negotiations or discussions, and to use the minister's own words, "on an official level". If the Secretary of State for External Affairs has no knowledge about this, I do not see how we can get any information from him. We can definitely receive answers from the minister here today as to what is meant by the information which he has given this committee. Because of that fact I do not see how we are going to get any more information from the Secretary of State for External Affairs than the steering committee has got now, and which has now been placed before this committee. I think there will be some serious discussion on this matter, and I think it is a matter upon which only the Minister of National Defence and the Prime Minister can comment. This is the way I analyze the situation.

The CHAIRMAN: Do you wish to second Mr. Smith's motion?

Mr. WINCH: Yes, on that basis I would second his motion.

The CHAIRMAN: Are we ready for the question, gentlemen?

Mr. SPENCER: Mr. Chairman, I think perhaps what I am about to say is more on a point of order than it is speaking to the motion; but I take it, from the statement that was made by Mr. Hellyer, that someone appearing before this committee has not been telling the truth. I listened very carefully to the reference which Mr. Hellyer presented to the committee and I fail to see, in the evidence, anything in direct conflict with the report of the steering committee. These statements are perfectly reconcilable. I do not think any member of this committee should, on the basis of his own opinion of the evidence, make any such statement, that anybody appearing before this committee is not telling the truth. I think that is a very improper statement to make and I would be hopeful that Mr. Hellyer would withdraw that remark, or temper it.

Mr. WINCH: Instead of being touchy, perhaps we should get down to business.

The CHAIRMAN: Yes. I would say, Mr. Spencer, that your position is well taken.

Mr. WINCH: If we carry on this way we are not going to serve our purpose.

Mr. SPENCER: I do not think anyone should be allowed to make statements of that type.

Mr. SMITH (*Calgary South*): I think Mr. Winch is correct, and I think Mr. Spencer, as I myself, hopes that Mr. Hellyer will not make any more irresponsible statements.

The CHAIRMAN: I know that Mr. Hellyer in the heat of the argument inferred several things that he did not quite mean. It certainly is not within the rules of courtesy in either the committee of the whole, or this committee, to make such statements. I am not asking Mr. Hellyer to retract his statements by any means, but we should get on with our business.

Mr. HELLYER: Mr. Chairman, first of all, as far as I am concerned if I used improper language I withdraw it; but the statements are directly contradictory in that either those statements made by the Minister of National Defence and the Prime Minister are wrong, or the statements made by the Secretary of State for External Affairs are wrong.

The CHAIRMAN: That is just your estimation.

Mr. SMITH (*Calgary South*): Just because you do not understand the statements does not make them wrong.

Mr. HELLYER: I would like to move on amendment to the motion that the word "not" in the second bottom line be deleted.

The CHAIRMAN: That would be absolutely contrary to the rules. No amendment of that kind can be made, Mr. Hellyer, and you know it.

Mr. HELLYER: If that is your ruling, Mr. Chairman, all we can do is vote against the steering committee's report.

The CHAIRMAN: Are you ready for the question, gentlemen?

Mr. HELLYER: No, I would like just briefly to comment in reply to Mr. Smith's statement. Mr. Smith, not being in his usual form today, for obvious reasons—

Mr. SMITH (*Calgary South*): That is a matter of opinion.

Mr. HELLYER: —Mr. Smith has drawn a fine distinction between discussions and negotiations. I accept that distinction, Mr. Chairman. I was very careful to use the word "negotiations" throughout the entire statement which I made to the committee, because the word "negotiations" was used in every reference to *Hansard* which I read. This is the same word which is used in the statement of the Secretary of State for External Affairs; so that there is no question of semantics here. These gentlemen all know what the word "negotiations" means, and each one of them used the same word. These are negotiations, not discussions, talks or informal chit-chat.

Mr. WINCH: He is trying to reach an agreement.

Mr. HELLYER: This statement that we received this morning from the Secretary of State for External Affairs does not confine itself specifically to NORAD or the use of atomic warheads in Canada.

Mr. Smith again pointed out the difference between service discussions at the service level and diplomatic discussions and exchange of notes. I want to make it perfectly clear that it is the latter that I am referring to. I am talking about these discussions at the diplomatic level, and the possible exchange of notes.



I would like to put on the record one more quotation, if I may, just to demonstrate precisely what we are talking about.

The Minister of National Defence, in the House of Commons on July 3, 1959 at page 5414 said this:

Now, regarding the position of the supply of nuclear weapons, it was stated by the Prime Minister in the house on February 20 that problems connected with arming the Canadian brigade in Europe with short-range nuclear weapons for NATO defence tasks are also being studied. These studies are continuing and are fast reaching a stage when there can be an exchange of notes of this matter.

The CHAIRMAN: There could be, yes.

Mr. HELLYER: Now, surely the Minister of National Defence there is referring to negotiations at the diplomatic level and anticipated an exchange of notes, which would set out some formal agreement. I think Mr. Smith is quite wrong when he tries to create the impression that the only negotiations which are referred to, or have been referred to by the Minister of National Defence and the Prime Minister, were some informal talks.

The CHAIRMAN: Thank you, Mr. Hellyer.

Mr. SMITH (*Calgary South*): Mr. Hellyer has said nothing new.

The CHAIRMAN: Are you ready for the question, gentlemen?

Some Hon. MEMBERS: Question.

The CHAIRMAN: All those in favour of the report of the special subcommittee raise their right hands, please. Those contrary raise their right hands. Thank you.

Agreed to.

Mr. WINCH: Mr. Chairman, having finished with that, I now think there is only one procedure to follow, which has high priority, and that is, the Minister of National Defence should give us an explanation, if there is one, in respect of what he meant both in this committee and in the House of Commons in regard to negotiations with the United States of America regarding the storage and use of nuclear warheads in Canada, particularly in view of the fact that we have a definite statement from the Secretary of State for External Affairs that there have been no negotiations.

The CHAIRMAN: Yes.

Mr. WINCH: This strikes me as being the proper procedure to follow.

Mr. PEARKES: When speaking to this committee on previous occasions I quoted the statements which had been made by the Prime Minister in 1959 and on January 18, 1960, in which he used the word "negotiations". He said "negotiations" were going on regarding the use and storage of these nuclear weapons. You will notice on page 333 of this committee's reports, I made it quite clear that these negotiations, and I used the word "negotiations", have not reached the stage of an official exchange of notes regarding these weapons. That statement appears near the bottom of the page.

Mr. WINCH: I would also like to make a comment in respect of a statement made on that same page. You are referring to page 333?

Mr. PEARKES: I beg your pardon?

Mr. WINCH: You were referring to page 333?

Mr. PEARKES: Yes.

The CHAIRMAN: The minister referred to page 333, the last paragraph.

Mr. WINCH: I will also comment at the same time in respect of your statement, which appears there: "the final negotiations and exchange of notes comes under external affairs".

The CHAIRMAN: The minister will refer to that statement later.

Mr. PEARKES: You will notice that they have not reached the stage of an official exchange of notes. Now, I was using the term "negotiations" in exactly the same way as I interpreted the Prime Minister to be using the term "negotiations". That is, that there had been talks, inquiries and exchanges of letters as opposed to formal notes, between the officials in my department, between myself and the United States officials, regarding the use and possible storage of these weapons in Canada, and for our NATO forces.

Now, I referred to "negotiations" in the same terms as I think the Prime Minister was referring to "negotiations".

I think Mr. Green was referring to "negotiations" in the sense of an exchange of a formal note.

I stated very definitely that we had not reached this stage of the exchange of a formal note. That has not been done. I think, as Mr. Green indicated, there have been drafts of notes exchanged regarding Harmon field and Goose Bay.

Mr. SMITH (*Calgary South*): Mr. Chairman, could we ask the Minister of National Defence what the actual sequence of events are that would lead us to an exchange of notes and a final agreement, so that we can understand exactly what we are talking about? If we take a hypothetical case—

Mr. WINCH: Let us take an actual case.

Mr. SMITH (*Calgary South*): If I may ask the question—

Mr. HELLYER: Perhaps you could take an actual case.

Mr. SMITH (*Calgary South*): Mr. Hellyer, you will have an opportunity to take up the committee's time later.

Mr. HELLYER: Let us get out of the clouds.

Mr. SMITH (*Calgary South*): Let us assume that we are going to use nuclear weapons in Canada. First of all, as I gathered, you would, through negotiations or discussions—whichever word you want to use—with your own personnel examine the possibility. Would that be the first step that you would take.

Mr. PEARKES: Yes. Canadian officers who would be, we will say, in Washington, would explore the possibility at perhaps not a very high level.

Mr. SMITH (*Calgary South*): Yes.

Mr. PEARKES: They would find out that nuclear weapons might, under certain circumstances, be made available. Then there would be discussions at various levels. They might decide that what was suggested would not be acceptable at all to the Canadian government. I am talking about a hypothetical case.

Mr. SMITH (*Calgary South*): All right, sir, but in the meantime—

Mr. WINCH: Just a minute now.

Mr. SMITH (*Calgary South*): I would like to just finish my question, Mr. Winch.

In the meantime a cabinet decision in regard to policy would have to be established. Would that also be correct?

Mr. PEARKES: Yes, at some stage. Of course a cabinet decision would have to be reached, but there might be exploratory discussions within the cabinet.

Mr. SMITH (*Calgary South*): I appreciate that.

Mr. PEARKES: And the final exchange of a formal note would not be accomplished until all that preliminary work had been ironed out to the satisfaction, or very nearly to the satisfaction, of the two parties concerned. Once the formal note is exchanged, there are few amendments to it.

Mr. SMITH (*Calgary South*): You would then have discussions at the service level followed by cabinet discussions where a policy decision would be arrived at by the cabinet as a whole, and then the Department of External Affairs at the diplomatic level would exchange notes. Is this the complete sequence?

Mr. PEARKES: Yes. We are speaking in general of course.

Mr. SMITH (*Calgary South*): That is right.

Mr. PEARKES: We are speaking of a general policy where any note is exchanged.

Mr. WINCH: Could we come out of the clouds, and rather than refer to hypothetical proposals, deal with a specific item.

At page 323 of the minutes of this committee I said:

That is the very point. Can the minister now, in view of what he has just read out, tell us whether in the negotiations—as far as they have gone so far—is it on the Bomarc, or just on conventional warheads? Are you now discussing with the United States the placing of nuclear warheads in Canada for use on the Bomarc? Is that what I understand from that?

Mr. Pearkes replies:

There are preliminary discussions regarding that at the official level.

What is the procedure that you followed in respect of the Bomarc? What do you mean by—"at the official level?"

Mr. PEARKES: Discussions at the official level would take place between the chiefs of staff of the various countries, or perhaps even between officers of lower rank.

Mr. WINCH: What was your procedure, and what has been your procedure up to this point in respect of Bomarc's having nuclear warheads?

Mr. PEARKES: There have been discussions going on in various places regarding the desirability of having nuclear warheads, regarding the sending of the information which is necessary, and regarding the storage of these warheads at the sites or elsewhere. All that information has been collected. With regard to Harmon Field and Goose Bay, we have now practically reached the final stage of negotiations and the exchange of formal notes. We are almost ready to proceed with this exchange.

Mr. WINCH: How does the decision to use the Bomarc follow, after the letting of a contract to build the Bomarc. You have already agreed to the policy of using the Bomarc in Canada. That policy must have been decided upon before you decided the use to which it was going to be put, because you are still in the process of discussing whether or not it will have nuclear warheads.

The CHAIRMAN: You mean whether it will have conventional warheads or nuclear warheads?

Mr. PEARKES: The Bomarc can use either conventional or nuclear warheads. As has been stated by the Prime Minister, it will require a nuclear warhead if it is to have its full potential.

Mr. HELLYER: Have there been discussions with the Americans in regard to the possibility of Canada using nuclear warheads on the Bomarc's?

Mr. PEARKES: We have had discussions in regard to this point with the Americans.



Mr. HELLYER: Do you think that the Americans would reinstate the funds to make the Bomarc available to Canadian squadrons if they thought there was any possibility that we did not intend to equip them with nuclear warheads?

Mr. PEARKES: I could not answer that question.

The CHAIRMAN: I do not see how the minister could answer that question.

Mr. HELLYER: I think he is wise not to.

The CHAIRMAN: I do not see how the minister could possibly know what is in the minds of the United States senators and congressmen.

Mr. MACDONALD (*Kings*): I have a question, Mr. Chairman, in regard to the bases at Harmon Field and Goose Bay. These bases were under lease I believe in the days before Newfoundland entered confederation. Would these stations be considered in the same category. Mr. Minister, as the other stations in Canada with regard to the storage of nuclear warheads? By that question I mean, have we got the same control over those stations as we have over other stations in Canada?

Mr. PEARKES: There are no nuclear warheads at the present time stored at Goose Bay of Harmon Field, or at any other station in Canada. We are in the course of completing negotiations which will finally end with an exchange of a formal note which then will define exactly the conditions under which the nuclear weapons for defensive purposes can be stored—not for transportation by SAC bombers, but purely for the air defence squadrons of the United States air force stationed at Goose Bay and Harmon Field. As I say we now are completing discussion leading up to a formal note which, if agreed upon, will lay down the conditions under which those nuclear weapons can be stored at Goose Bay and Harmon Field.

Mr. WINCH: I presume it has reached the stage of formal notes, otherwise we would not have had that answer from the Secretary of State for External Affairs.

Mr. PEARKES: I think I am perfectly correct in saying that they are reaching the stage of very near finality in connection with the exchange of the note. There have been draft notes sent to the United States in connection with these two bases as indicated by the Secretary of State for External Affairs.

Mr. SMITH (*Calgary South*): The reason I drew a hypothetical case to the attention of my two Buck Rogers here is that we have no actual case; the exchange of notes has not yet been completed, even in respect of these two bases.

Mr. PEARKES: It has not been completed on these two bases. It is nearing the final stage.

Mr. HELLYER: But negotiations in respect of an exchange of notes have been carried on for some time.

Mr. PEARKES: Yes.

Mr. HELLYER: Is there any difference of opinion between the two governments as to whether or not it is necessary for the United States to obtain government approval to use atomic warheads at those two bases.

Mr. PEARKES: Is there any difference of opinion between the Americans and ourselves?

Mr. HELLYER: Yes; as to whether or not it is necessary to have our concurrence.

Mr. PEARKES: No. They agree wholeheartedly that it is necessary to obtain Canadian consent before these weapons can be stored or used at Harmon or Goose Bay.

Mr. HELLYER: Mr. Chairman, I would like to ask the minister if any cabinet decision has been taken to use atomic warheads or Canadian weapons?

The CHAIRMAN: You would like the minister to tell you a decision of the cabinet before it is announced in the house.

Mr. PEARKES: No Canadian decision has been announced in that respect.

Mr. HELLYER: I think it is a fair question. We have to come to grips with this. We are asked to spend money on weapons which, to use a phrase of the minister and the Prime Minister, only reach their full potential when armed with atomic warheads. Obviously, a decision has to be taken and I do not think we should be asked to vote funds which would commit the people of the country to the expenditure of millions of dollars before that.

The CHAIRMAN: Are you speaking about such weapons as the Bomarc and the Honest John.

Mr. HELLYER: Yes.

Mr. LAMBERT: Mr. Hellyer is asking the minister to announce whether or not there has been a cabinet decision. If he asks the question at the proper time in the house, then the government if it wishes to announce a cabinet decision will do so.

Mr. WINCH: If all the information is given in the house there is no point in setting up this committee.

Mr. HELLYER: Mr. Chairman, you will have to forgive the hon. member, who has not been here very long. I am sure if there is information which will be useful to the committee there is no reason why the minister should not give it to us, so that we can consider these estimates in an orderly fashion.

The CHAIRMAN: The minister stated no decision has been reached, that the finalization of the negotiations has not been completed, and I do not see how he can go any further than he did.

Mr. HELLYER: Did he say no cabinet decision has been taken as to whether or not Canadian troops would use atomic weapons?

Mr. PEARKES: I said no cabinet decision has been announced.

Mr. HELLYER: But perhaps there is a decision which has not been announced which affects the usefulness or otherwise of the weapons we are asked to vote money for.

The CHAIRMAN: I think you will have to get back into the cabinet before you get an answer on that one.

Mr. WINCH: No politics.

The CHAIRMAN: Gentlemen, there is a possibility that the house might close in three weeks. I would like to get these estimates in. Could we go on with page 44 in this estimates book.

Mr. HELLYER: Really and truly I do not think it is satisfactory that we should proceed to a discussion of the detailed estimates of expenditure for the Department of National Defence when basic fundamental policy has not been made available to us. Surely, this is not an unreasonable request. Surely we are entitled to know, as representatives of Canadian taxpayers, what we are being asked to do and where the Department of National Defence is going.

The CHAIRMAN: When we get to the item there is no reason why you cannot ask questions on the Bomarc or the Honest John at that time.

Mr. PEARKES: Surely the position is made perfectly clear in the statement which was given by the Prime Minister. The Prime Minister made it quite clear that these negotiations were proceeding so that if and when required these weapons would be available. These are his words:

In these circumstances negotiations are proceeding with the United States in order that the necessary weapons can be made available for Canadian defence units if and when they are required.

Mr. HELLYER: Is that his statement of February 20, 1959?

Mr. PEARKES: It is January 18. I repeated it to this committee at least once previously. At page 322 of the proceedings of the committee I quoted:

In these circumstances negotiations are proceeding with the United States in order that the necessary weapons can be made available for Canadian defence units if and when they are required.

I cannot comment in detail on these negotiations but I wish to state that arrangements for the safeguarding and security of all such weapons in Canada will be subject to Canadian approval and consent.

Mr. SMITH (*Calgary South*): Surely the point under consideration is that the member wants the minister to announce important cabinet decisions in this committee. If Mr. Hellyer had been in the former Liberal cabinet long enough, even with its loose practices, he would have known that even they would not have done this.

Mr. WINCH: I think Mr. Smith is a little wrong there. I think he is very much wrong. I hope the minister can go a little further. It is under this first item, here, that we can ask questions on principle and on policy. It must be done before we get into the individual items. I do not think it is good enough that this committee should be satisfied with only a statement such as has been read out as to if and when, because this involves the expenditure of a great deal of money and it is, to a considerable extent, for the re-equipping of Canada's armed forces. Now the government must have reached a decision already on policy as to the purpose for which this re-equipping has to be done. In view of the fact that they are asking for a certain amount of money they must know what position they will take as to whether they will be strictly conventional or whether they can be adapted for nuclear warheads.

I can understand that discussions and negotiations must go on and on, but I am thinking that the government must have in mind now what it is heading for and what the policy is going to be. I am asking if the minister can tell us what is the objective, the policy goal, of the government when they come and ask for the re-equipping of Canadian troops and the maintenance of the Canadian troops.

Mr. PEARKES: We are making all necessary arrangements so that these weapons can be available for use if and when required.

The CHAIRMAN: Mr. Minister, may I ask you one question, in order to see if we might finalize this. Is there any money in these estimates of 1960-61 for nuclear warheads?

Mr. PEARKES: No.

Mr. HELLYER: We have gone over this before. This is not the point.

The CHAIRMAN: It is a fairly good point.

Mr. HELLYER: The point is whether you are buying vehicles which only reach their full potential when armed with nuclear warheads. Certainly if these are not armed with nuclear warheads then they are absolutely useless. The Bomarc is useless even with the nuclear warhead.

The CHAIRMAN: I am afraid this is developing into a political hay fight.

Mr. HELLYER: No. It is an honest attempt by this committee to get some idea of the policy.

The CHAIRMAN: You just made a statement that the Bomarc was of no use with the atomic warhead and less use without it.



Mr. HELLYER: That is part of the discussion.

The CHAIRMAN: That is an opinion. If we are going to continue on in this vein we will never get into the estimates. There is no reason why you cannot ask questions on the Bomarc when we get to that. Could we leave item 1 now and start on item 218, inspection services?

Mr. WINCH: I am still on the over-all search for information.

The CHAIRMAN: Would you hold it until we get to the item.

Mr. HELLYER: Surely, for instance, in the matter of air defence, if Canada is going to use weapons armed with nuclear warheads it can contribute to the same degree as comparable forces of the United States, and if not then we have to decide whether or not we should be participating. These are fundamental decisions and before we consider those we have to know what is the government's intention.

The CHAIRMAN: You know and I know you are not going to get cabinet decisions in this committee. Never in the history of parliament as we know it have they been given out that way. I do not think we will have it this year.

Mr. HELLYER: With deference, I think that is a statement you might like to change.

The CHAIRMAN: You will have to prove I am wrong.

We are on page 44.

Mr. WINCH: Before you go on with the individual items there is one question I asked; but even before that there is something I would like to have made clear if the minister would. There is the division of work and responsibility as between yourself as Minister of National Defence and the Associate Minister of National Defence. I understand there has been a division of responsibility. I would like to get it clear, because they both come under this same vote.

Mr. PEARKES: I announced it in the house earlier this year. I do not have the actual words of the statement I made, but I was asked the question earlier this year. Generally speaking the associate minister sits in on all policy discussions and gives us his advice; but policy is the responsibility of the Minister of National Defence, whereas in certain fields of administration the Associate Minister of National Defence has a responsibility there.

Mr. WINCH: I wonder if you have the answer to the question asked in respect of recruiting.

Mr. PEARKES: We do not have the information on recruiting. We are collecting that for you. Regarding the other questions I have a table here showing the strength of National Defence headquarters. The total strength of service personnel at the present time is 3,039 and the total civilian strength is 4,847. The last published figures in this white book dated December 31, 1958, show service personnel as 3,055 and civilian personnel as 5,285. You will see there has been a sizeable reduction in the number of civilian personnel and a small reduction in the size of the service personnel. We have not made as large a reduction in the service personnel as has been expected, owing to the concentration of planning by the army in connection with their survival operations.

Mr. Smith asked questions about the bases.

Facilities are at present available on all Canadian air defence command bases to enable recovery of U.S. interceptors on completion of air defence missions in Canadian air space. These recovery operations would consist of refuelling and restarting these aircraft plus any minor repairs that were required. Recovery could also take place on certain other R.C.A.F. stations where special facilities are available. These latter include Winnipeg, Saskatoon, and

Portage. The air defence command bases are Comox, North Bay, Ottawa, Bagotville, Chatham, St. Hubert and Cold Lake. One of the functions of these bases is to recover and refuel U.S.A.F. aircraft. There are no facilities for re-arming U.S.A.F. aircraft at R.C.A.F. bases.

Mr. HELLYER: I have a question on that. If there are no facilities for re-arming the aircraft, what purpose does it serve?

Mr. PEARKES: Recovery. If there are minor malfunctionings of the aircraft these can be adjusted. They can refuel.

Mr. WINCH: So that they can get home.

Mr. PEARKES: It does not necessarily mean they will be unarmed. They may not have used their armament. But, they might have used up most of their fuel, and have to refuel so that they can go on again.

Mr. SMITH (*Calgary South*): Mr. Winch provided the answer, when he said "so they can get home".

Mr. HELLYER: That is fine—so they can get home—but it seemed to me the impression was created earlier that by having these facilities at Canadian bases it would assist United States interceptors in the actual carrying out of battle in any possible hostility.

Mr. PEARKES: Very definitely; it extends their range.

Mr. HELLYER: It extends their range in the fact that they can land without having to return to their own bases, but what if they wished to re-engage in combat? They are completely immobilized.

Mr. WEBSTER: They are refueled and sent on their way, without armament.

Mr. PEARKES: They would be able to refuel, go back to their base, and re-arm.

Mr. HELLYER: Does it not seem inefficient to the minister that they should refuel and have to go back to their own bases in order to get their armament?

Mr. SMITH (*Calgary South*): Is it not correct, Mr. Minister, that the practice that would be followed is that additional squadrons would be brought into play, which is the same principle as was used in the last war?

Mr. Chairman, I have a question on recruiting.

The CHAIRMAN: We have not the evidence yet.

Mr. SMITH (*Calgary South*): I have one question in relation to the minister's statement, in which he refers to the high turnover. May I proceed?

The CHAIRMAN: Yes, or you can hold it, whichever you wish, until we get all the evidence.

The minister is obtaining some information for Mr. Hellyer, and I think it would be advisable to hold it until that time.

Mr. SMITH (*Calgary South*): I will accept your considered advice, Mr. Chairman.

The CHAIRMAN: May we get on to page 44 and to page 292.

Our first vote is departmental administration, which we have left open. We have had a good deal of discussion already on it.

My suggestion would be that we go to vote 218—inspection services, which is at page 292.

Item 218. Operation and maintenance ..... \$ 6,523,300

Mr. LAMBERT: In that connection, would the recent increases in the civil service pay increase the amount of the vote, or will there be a supplementary vote in respect of this item—that is, the estimated salaries may be affected.

Mr. ARMSTRONG: May I answer that, Mr. Chairman.

The CHAIRMAN: Proceed.

Mr. ARMSTRONG: You are speaking of civil salaries.

Mr. LAMBERT: Yes.

Mr. ARMSTRONG: Well, provisions for any increase as a result of the recent increase in civil salaries is being made by the Department of Finance in their supplementary estimates. We would draw on that, if the need arises for additional funds.

The CHAIRMAN: Are there any further questions on 218?

Mr. WINCH: What are professional and special services? What does that consist of, under the inspection department?

Mr. PEARKES: Those are the usual services performed by outside agencies, where the personnel is not available.

Inspection and testing by outside agencies include such things as miscellaneous inspections by the Great Britain ministry of supply, when we obtain material from there; from the chemical branch, chemical and physical testing of materials, including petroleum products, electronic engineering, and testing of wire cables, as well as altitude, heat, cold and humidity testing, and that sort of thing.

Mr. LAMBERT: In previous years, and particularly in 1958-59, it was indicated before the estimates committee that this particular branch of the service was being reduced because of the lessening requirement for re-equipment, and so on, that we were undergoing at that time. Does the minister foresee any continuance in reduction of inspection services, or is it likely to increase?

Mr. PEARKES: We have a reduction in the number of positions which have been filled. A year ago there were 1,569; this year we are estimating for 1,415, which is an indication that there is a reduction in the amount of inspection services which is required.

Mr. LAMBERT: I am basing my question from looking over the figures of actual expenditures from 1955 onward and projected into this year—and it would appear that that is the pattern. Do you expect it will continue?

Mr. PEARKES: The pattern is of lessening all the requirements; but we cannot expect the same degree of reduction in the future because, I think, we are getting pretty nearly down to bed rock.

The CHAIRMAN: Mr. Carter?

Mr. CARTER: Nearly all that reduction of 100 to which the minister has referred, has been made in the various grades of stores inspectors—inspectors of stores; how have you been able to reduce that particular group of people so much? Have they been put into some other classification?

Mr. PEARKES: No. We have been able to introduce more up to date methods of inspection services, which have reduced the number of personnel which are actually required.

Mr. CARTER: Could you say what kind? Have you mechanized your methods of inspection?

Mr. P. S. CONROY (*Controller General, Inspection Services*): Yes. There are new methods coming into being.

Mr. SMITH (*Calgary South*): For the benefit of the reporter, Mr. Chairman, I think this gentleman should be identified.

The CHAIRMAN: This is Mr. Conroy, controller general, inspection services.

Mr. CONROY: Quality control is one way. Instead of having 40 inspectors in a plant, you can reduce the number of inspectors—and they have to be of a better grade—to 4. That has been going on consistently during the past number of years. The reduction in work is not to the same extent as shown in the reduction of staff but is due, to a great extent, to improved methods.



The CHAIRMAN: Are there any further questions of Mr. Conroy?

Mr. SMITH (*Calgary South*): I would like to ask a basic question of the minister.

The CHAIRMAN: Proceed.

Mr. SMITH (*Calgary South*): "Inspection services" is rather a broad term, and I wonder if you could give a very brief description of what it encompasses.

Mr. PEARKES: There are a very large number of activities which are carried out by inspection services. They inspect all the material—all the equipment, all the material which is being purchased for the department—armament, clothing, electronic equipment, hardware for barrack stores and all that sort of thing. Then, of course, there are the inspection services at the testing fields for ammunition—where ammunition all has to be tested before it can be used. Then, there are inspection services connected with the navy. It is a most important service that we have.

Mr. SMITH (*Calgary South*): I realize that, and this just confirms what I thought it was.

May I ask, Mr. Minister, whether in all instances your purchases are made through the Department of Defence Production, and that your own inspection teams make the final inspection rather than the Department of Defence Production officials?

Mr. PEARKES: We have our own inspectors there during the work, where the supplies are being provided through the Department of Defence Production.

Mr. SMITH (*Calgary South*): Is it correct that in the acceptance of aircraft from a private manufacturer that those people who would carry out the inspection would also be categorized in this grouping?

Mr. PEARKES: The R.C.A.F., I know, carry out their own inspection, but I would like to check and see whether we have any of the inspection services personnel on aircraft?

Mr. CONROY: We have them on aircraft components, but the actual construction and flight inspection of the aircraft is done by the R.C.A.F.

Mr. SMITH (*Calgary South*): Are these appointments all through the civil service commission?

Mr. PEARKES: All civil servants. They are all through the civil service commission.

Mr. SMITH (*Calgary South*): We have read the reports—and you can confirm or deny it—of the views expressed by a number of departments, which includes your own, in requesting a greater control by the Department of National Defence with respect to these employees, in so far as control, hiring and categorizing—and this was the subject matter of the estimates committee of June two years ago.

Have you expressed any views to the commission in this matter?

Mr. PEARKES: As I say, we receive all our employees in this department through the civil service, except, perhaps, the casual employee.

Mr. SMITH (*Calgary South*): I am wondering if it is an unhappy state?

Mr. PEARKES: I think it would be perfectly fair to say we are satisfied with the type of personnel that we obtain through the civil service, which is the accepted policy of the government.

Mr. SMITH (*Calgary South*): You have no objection or complaint to this?

Mr. PEARKES: We are receiving good personnel.

Mr. SMITH (*Calgary South*): Thank you.

The CHAIRMAN: Are there any further questions on inspection services, while Mr. Conroy is here?

Mr. MACDONALD (*Kings*): I notice there is a commendable reduction of 154 persons in this section. I presume there has been no comparable increase in national defence itself. Has this been brought about by coordination of your inspection services—for example, say new testing grounds at Nicolet, which I saw a few weeks ago?

Mr. PEARKES: It has been brought about, as Mr. Conroy has explained, by greater efficiency and more efficient methods in the inspection services.

The CHAIRMAN: Are there any further questions on 218?

Mr. HELLYER: Could the minister tell us how many inspectors the department has at Canadian Arsenals, Long Branch, and Canadian Arsenals, Scarborough, for example?

Mr. PEARKES: We have not that information.

The CHAIRMAN: He will obtain it for you.

Mr. HELLYER: Could the minister give us a list of the major projects. Are we still on 218?

The CHAIRMAN: We are still on 218, and then we will go on to 219.

Mr. HELLYER: Well, I will leave my question until we reach 219.

Item agreed to.

Item 219. Construction or acquisition of buildings, works, land and equipment .....	\$ 431,100
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Have you a question, Mr. Hellyer?

Mr. HELLYER: I was wondering, Mr. Chairman, if we could have a list of the major construction projects, where they are, and when they were commenced.

Mr. WINCH: At the same time, could we get the answer as to whether anything is proceeding at Vancouver in respect of the armouries?

The CHAIRMAN: That would come under the army.

Mr. PEARKES: This is purely for the inspection services.

Mr. WINCH: I will have to get an answer to that, or I will get shot.

The CHAIRMAN: Mr. Hellyer, will you repeat your question?

Mr. HELLYER: I would like to know the major projects at which these inspectors are stationed.

Mr. PEARKES: On construction?

Mr. HELLYER: Yes.

Mr. PEARKES: The main firing centre and combined ranges at Nicolet—\$60,000; then there is an incendiary functioning and photographic building—\$25,000; a 20-millimeter range at the proof firing building with a concrete front, wall and floor, for \$26,000; climatic firing range, which is \$5,000, and then miscellaneous buildings, \$7,000. Then, at Valcartier, there is a small arm proof experimental establishment, where there is some minor construction projects.

The CHAIRMAN: Are there any further questions on construction?

Mr. HELLYER: Is this expenditure for the buildings—the properties themselves?

The CHAIRMAN: Construction or acquisition of buildings.

Mr. PEARKES: Construction of buildings. It is the replacement of some condemned buildings at these various establishments.

Mr. HELLYER: Replacement of some condemned buildings?

Mr. PEARKES: Yes.

Mr. HELLYER: Does this include any reconstruction due to fire losses?

Mr. PEARKES: No.

Mr. HELLYER: Could the minister tell us the reason this item is set out separately, rather than under one of the four major categories?

Mr. PEARKES: This deals only with the inspection services, and does not deal with the general construction of army, navy and air force buildings.

Mr. HELLYER: That is the point on which I was confused. It is just the inspection services to these buildings, and not any part of the cost of construction.

Mr. PEARKES: No, no, no; these are for the construction of buildings required by the inspection services.

Mr. HELLYER: For carrying out their inspection services?

Mr. PEARKES: Yes, such as these examinations.

Mr. HELLYER: Of photographic supplies, and this type of thing?

Mr. PEARKES: Yes.

Mr. HELLYER: And these are part and parcel of the establishment of inspection services?

Mr. PEARKES: Yes.

The CHAIRMAN: Mr. Smith, have you a question?

Mr. SMITH (*Calgary South*): The need for my question has disappeared.

The CHAIRMAN: Are there any further questions on 219?

Item agreed to.

#### ROYAL CANADIAN NAVY

Item 220. Operation and maintenance ..... \$197,041,557

Mr. HELLYER: Mr. Chairman, would this be a convenient time to break?

The CHAIRMAN: Yes.

Gentlemen, we shall meet again on Wednesday at 3.30, and possibly on Thursday as well as Friday of that week. It depends how fast we get along.

Mr. HELLYER: You said Wednesday?

The CHAIRMAN: Yes, at 3.30, and possibly Thursday, as well as Friday.

—The committee adjourned.





## ORDERS OF REFERENCE

MONDAY, June 27, 1960.

*Ordered*,—That the name of Mr. Morton be substituted for that of Mr. Fairfield on the Special Committee on Defence Expenditures.

THURSDAY, June 30, 1960.

*Ordered*,—That the name of Mr. Roberge be substituted for that of Mr. Cardin on the Special Committee on Defence Expenditures.

Attest.

L.-J. RAYMOND,  
*Clerk of the House.*





## MINUTES OF PROCEEDINGS

House of Commons, Room 238-S.

WEDNESDAY, July 6, 1960.

(19)

The Special Committee on Defence Expenditures met at 3.30 o'clock p.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Halpenny, Hellyer, Macdonald (*Kings*), Morton, Parizeau, Roberge, Smith (*Calgary South*), Spencer, Webster, Winch.—12.

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Mr. D. B. Dwyer, Superintendent, Parliamentary Returns; Rear Admiral R. A. Wright, Naval Comptroller.

The Committee resumed from Thursday, June 30th, consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61.

Mr. Pearkes, before his examination, deposed two returns, in answer to questions at previous sittings, which were ordered to be printed as Appendices "A" and "B" to the present proceedings.

Mr. Armstrong and Rear Admiral Wright were also questioned.

Items 220 and 221 were approved.

And consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61 still continuing, it was adjourned until the following meeting.

At 5.05 o'clock p.m. the Committee adjourned to meet again at 3.30 o'clock p.m. Thursday, July 7th.

Antoine Chassé,  
*Clerk of the Committee.*



## EVIDENCE

WEDNESDAY, July 6, 1960.

3.30 p.m.

The CHAIRMAN: Gentlemen, thank you; we have a quorum.

Mr. Hellyer, you requested some information on the number of inspectors employed by inspection services at Long Branch—20; and at Scarborough—6.

There was a lot of information requested on the armed forces recruiting. There are six or seven pages. Is it agreeable that we have this information printed in the evidence, gentlemen, and then discuss it at a future date?

Agreed to.

The CHAIRMAN: Also Mr. Lambert required information regarding the construction, engineering design staffs and consultants; and there are a lot of figures and information concerning that here. I suggest that also be appended. Agreed?

Agreed to.

The CHAIRMAN: Gentlemen, if you turn to page 44 in your estimates book, you will recall that we completed "inspection services" and were on the first vote of the Royal Canadian Navy, which is at page 220, and in your estimates book at pages 296 to 304. I would suggest we take a page at a time.

Now, questions on page 296, Royal Canadian Navy?

Mr. WEBSTER: Mr. Chairman, before we get into page 296, I wonder if I could ask the minister if he would tell me the number of ships of the *St. Laurent* and *Restigouche* class which you expect to have when the present building program is finished?

Hon. G. R. PEARKES, (*Minister of National Defence*): What is that?

Mr. WEBSTER: Could you tell me the number of destroyers of the *St. Laurent* and *Restigouche* class which you have now built?

The CHAIRMAN: Would you mind holding that question until we come to the individual item, Mr. Webster? I would like to see how far we can go through the estimates today.

Questions on page 296, gentlemen; or shall we pass on to 297?

Mr. HELLYER: I would like to start with a few general questions in respect of the Royal Canadian Navy, Mr. Chairman.

The CHAIRMAN: On page 296, Mr. Hellyer?

Mr. HELLYER: No, I have some general questions.

The CHAIRMAN: Would you confine them to page 296 at the moment, Mr. Hellyer?

Mr. HELLYER: Could we not have a few general questions before we get into a too detailed discussion?

The CHAIRMAN: As you come to the individual item there will be nothing to prevent you from asking the questions you wish to ask on that particular item; but this is the only way we are going to get through, and I know that, because we have worked at it often before.

Mr. HELLYER: If you are going to do it that way you might as well agree to adjourn and report progress, and report back to the house.

The CHAIRMAN: You can ask any questions you wish on a particular item of the estimates.



Mr. HELLYER: I wish to ask a few general questions first, and they may overlap a number of items.

The CHAIRMAN: What is your wish, gentlemen? My recommendation is that we—

Mr. WEBSTER: Carry on with the estimates.

The CHAIRMAN: —that we carry on with the estimates, which is our job, and we must get them back to the house so that they may be considered. What is your wish, gentlemen? I will go along with the wish of the committee.

Mr. SMITH (*Calgary South*): Surely, Mr. Hellyer, with his vast knowledge of the Navy, is in a position to ask questions under the specific item which we are considering?

Mr. HELLYER: I thank the honourable member for that compliment, but I would like to ask a few general questions; and that would save a lot of time.

Mr. MACDONALD (*Kings*): I suggest, Mr. Chairman, if we do not follow the regular procedure and an organized plan, we will not get anywhere and there will be no satisfaction for anyone.

The CHAIRMAN: Is that agreed?

Mr. HELLYER: There has been no organized plan in this committee from the time we first met.

The CHAIRMAN: This is our first opportunity to be organized. We are down to the estimates and we have had, I think it is, 16 meetings on general questions and statements by you, the minister and other members of the committee. Now is our chance to consider the estimates.

Mr. WINCH: I presume, what you have in mind now is "operation and maintenance," under civil staff. That is at page 296?

The CHAIRMAN: Pages 296 to 304, I think it is.

Mr. WINCH: Page 302.

The CHAIRMAN: That is right, Mr. Winch. This vote, No. 220, is what you will see on page 44, and the details start at page 296.

#### Royal Canadian Navy

Item 220 Operation and Maintenance .....	\$197,041,557
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Then vote 221 starts on page 304. Now, if you turn to page 296, Mr. Winch, you will see the make-up of the civil staff, pretty well, on that page.

Mr. WEBSTER: Mr. Chairman, I have a question on page 297.

The CHAIRMAN: Would you just hold it, Mr. Webster, until we get to page 297, please?

Page 296 is made up pretty well of civil staff—solicitors, graduate nurses, administrative officers, architects, engineers, instructors, statisticians, technical officers, technicians, assistant technicians, purchasing agents, etc.

Mr. WINCH: The reason for the increase in the estimates this year over last year is what?

The CHAIRMAN: The increase in that complete vote?

Mr. WINCH: Yes—is why, I should say?

The CHAIRMAN: That is \$4,491,557, and you will get that as you go along in your items, pretty well. There does not seem to be any great increase in page 296, if you just check them over. I do not think you will find any increases.

Mr. PEARKES: Is that difference of \$4 million-odd for page 296?

The CHAIRMAN: That is the increase on the whole vote.

Are there any questions, or may the page carry?

Agreed to.

The CHAIRMAN: Page 297, gentlemen—civil staff, complete with personnel staff, departmental accountants, editors, dockyard supervisors, draftsmen, stationary engineers, clerks of works, etc. Would you like to check for increases?

Mr. CARTER: I see we are increasing the number of draftsmen. There is an increase in draftsman 3 and draftsman 2; is that a reclassification?

Mr. PEARKES: With regard to draftsmen, there is an increase of one in supervising draftsmen. There is an increase of one draftsman and a reduction of six student draftsmen. The up-grading is in accordance with the work which has been produced.

The CHAIRMAN: Are there any other questions on page 297?

Mr. WEBSTER: The third item down there—one social worker 4. Could you tell me where he or she would be stationed in the navy?

Mr. PEARKES: They act as counsellors to the naval personnel and perform various types of welfare work with the service personnel and dependents. There is a considerable amount of money in the naval benevolent fund, and they are able to counsel people in that respect.

Mr. WEBSTER: Would a social worker be stationed in Ottawa or one of the coast stations? You have only one.

Mr. PEARKES: They have always had this one social worker. He is available in Ottawa, but travels where required.

The CHAIRMAN: Any further questions on page 297? Shall the page carry?

Mr. CARTER: On page 297, before it carries: there is quite a reduction in time and material recorders. Last year it was \$113,400 and this year it is \$21,000. It has also gone from 27 persons to 5. How has that been achieved?

The CHAIRMAN: It has gone from \$113,400 to \$21,000. Mr. Minister?

Mr. PEARKES: This results from a provision for transfer of posts from principal naval overseers' compliment, in various locations, to the Department of Defence Production.

The CHAIRMAN: We will get this later—in defence production likely.

Does page 297 carry?

Agreed to.

The CHAIRMAN: Page 298—civil staff, still. Any questions, or may the page carry?

Mr. SMITH (*Calgary South*): Mr. Minister, I believe you have in all your forces—and we are dealing with the navy now, I realize—a team of people continually making assessments of usefulness of staff such as we have considered under this page, to determine whether or not they could be replaced or whether or not they might be utilized in other jobs. Is this a separate body that does this, or do all three services; and could you tell us how they function?

Mr. PEARKES: There is an establishment committee which consists of service personnel, departmental representatives and the civil service. They are continually and continuously employed. They move around the various establishments we have and, on an average, they visit an establishment once every three years.

They have a class examination to see whether there are the right number of personnel there. They are in permanent session all the time here in Ottawa. They meet permanently.

Mr. SMITH (*Calgary South*): May I ask, sir, if they in themselves have actually any authority, or do they purely make recommendations as a result of which actions are taken?

Mr. PEARKES: Yes, they make recommendations either to the chiefs of the services, or the deputy minister in the case of civilian personnel.

Mr. SMITH (*Calgary South*): Is this a practice that has been recently introduced or has it been performed for some years.

Mr. PEARKES: I think this has been performed for a number of years.

Mr. SMITH (*Calgary South*): May I ask you if you have considered the frequency with which they carry out their work? You said they met every three years, of course, but is this, in your view, frequent enough with the changing scene as it is today?

Mr. PEARKES: Yes, because recommendations come in, in between, and this information can be reviewed by the board as a result of the examinations they previously carried out.

Mr. SMITH (*Calgary South*): This establishment branch I presume is made up of the three services? Is it a team constituted of members from the three services?

Mr. PEARKES: No. Each service would have their own service personnel on that board. The navy would have their own board, the army would have their own board and the air force would have their own board as well.

Mr. SMITH (*Calgary South*): And their responsibility, I gather Mr. Minister, is only to check personnel, and does not take into account procedures or managements, or anything of that nature?

Mr. PEARKES: They could report on procedures and management.

Mr. MACDONALD (*Kings*): Mr. Chairman, about two thirds of the way down I notice a rather interesting item. It is, one driver, U.S.S.R. I wonder if the minister could give us some information about that.

Mr. PEARKES: The one driver, U.S.S.R. represents a driver for the military attaché in Moscow.

The CHAIRMAN: And the driver for the U.K., of course, would be a driver of the same general type.

Mr. PEARKES: The one driver, U.S.S.R. represents a driver for the military attaché in Moscow.

The CHAIRMAN: And the driver for the U.K., of course, would be a driver of the same general type.

Mr. MORTON: I notice here a change in the fire fighting organization. Fireman-labourer rates are up about 100; fire fighters are increased by about 40, but fire captains and fire lieutenants are about the same. Is there some explanation as to the reorganization there?

I am sorry, it is my mistake.

Mr. PEARKES: A fireman is a man who stokes the furnaces and a fire fighter is a man who would be described in civilian life as a fireman.

The CHAIRMAN: One puts the fire on and one puts it out.

Mr. PARIZEAU: I notice, Mr. Chairman, there are about 19 gardeners. Could you give us an explanation in this regard?

Mr. PEARKES: They are personnel employed at Royal Roads, for instance, where the navy is responsible for that college, and there are extensive grounds there. There are other gardeners employed in other naval establishments where there are lawns and occasional flower beds which have to be kept intact. They are really groundsmen rather than gardeners.

The CHAIRMAN: May that page carry?

Agreed to.

The CHAIRMAN: Page 299, gentlemen, still on civilian staff.



Mr. WINCH: Half way down the page you have an establishment of 248 communicators there from classification five to one. Could you tell us what they are?

Mr. PEARKES: In regard to the 248 communicators, this represents a re-classification of signal clerks in the Department of National Defence. They were classified as teletype writers, clerks and typists. They have the new classification of communicator. They had all different trade classification before, but this has now been changed to the more general term of communicators. There has been no increase in the total number of personnel. This represents just a change in the name of the trade.

Mr. CARTER: Near the bottom you have four less ammunition workers, and the item is up \$14. Do these people receive a special range of pay, or do they get a special allowance?

Mr. PEARKES: They are prevailing rate employees, They are paid at the prevailing rates in the area in which they are working.

Mr. CARTER: Yes; so this item would vary from year to year?

Mr. PEARKES: That would vary from year to year. If a union obtained a higher wage rate the civilian personnel employed by the service would, of course, receive a pay increase according to the union increase.

Mr. CARTER: Do they receive a special hazard pay?

Mr. PEARKES: Hazard pay?

Mr. CARTER: Yes.

Mr. PEARKES: I do not think so.

Mr. CARTER: The last item, Mr. Chairman, indicates that the navy managed to have six extra blacksmiths. I thought they were dying out. Is the navy keeping that trade alive or is that just a name? They do not do blacksmith work any more, I suppose.

Mr. PEARKES: It is just a name given to the man who does the blacksmith work. I can assure you there are no horses on the payroll.

The CHAIRMAN: Shall page 299 carry, gentlemen?

Agreed to.

The CHAIRMAN: Are there any questions in regard to page 300?

Mr. WEBSTER: Why would the navy only employ one butcher? This is about the 5th item down the page.

Mr. HELLYER: All of the horses have been used up.

Mr. PEARKES: I think that this would be a master butcher. Most of the butchering, or the cutting up of meat, would be done by service personnel; sailors themselves. This is a civilian hired for that purpose.

Mr. WEBSTER: Is he an instructor?

Mr. PEARKES: My impression is that he is more of an instructor teaching the men how to cut up the meat.

Mr. MACDONALD (Kings): I wonder if the minister could tell us what a holder on is.

Mr. PEARKES: I am always asked that question.

Mr. WINCH: You are getting confused with a hanger on.

Mr. PEARKES: He is an assistant riveter, and he is connected with riveting.

The CHAIRMAN: He has got hot hands.

Mr. PEARKES: He really is an apprenticed riveter.

Mr. PARIZEAU: Could the minister tell us what a blacksmith striker is? I was wondering if four blacksmith strikers were enough to strike nine blacksmiths.

Mr. PEARKES: A blacksmith striker is a navy term for an assistant blacksmith. He has exactly the same relation to a blacksmith as a holder on has to a riveter.

Mr. WEBSTER: The word hammersmith comes in down the page too.

The CHAIRMAN: Let us carry on.

Mr. PEARKES: A hammersmith repairs the tools used for repairs.

Mr. SMITH (*Calgary South*): I wonder if I could ask the minister a question, and I do so seriously, sir.

The CHAIRMAN: Is this in regard to page 300?

Mr. SMITH (*Calgary South*): Yes, Mr. Halpenny.

You have names listed here, sir, such as tile setters, waitresses and so on. Would it not be more economical, or would it not be better economics for the department to attempt to contract a great deal more of this type of work rather than attempting to retain semi-skilled and in many instances, skilled people within the service? I recognize the need for some flexibility within the services in having these people on hand; but under contract work, of which you do a great deal as well, is it not much better to accept this principle?

Mr. PEARKES: We try to keep a balance. It is necessary to have some of these tradesmen available at all times. Where the work fluctuates at all, that is when we let it out to contractors. It is really an attempt to try to find or to assess a correct balance. That is one of the jobs which this established board reviews the whole time.

Mr. SMITH (*Calgary South*): I suppose that is necessary, but I come back to the point where you will see the category of tile setters, tailors, and tailoresses. Is it not an accepted principle that so far as the defence department is concerned, basically you can generally do this at a lower price to the department and to the government by contracting it out? Or is this a wrong philosophy?

Mr. PEARKES: This applied to dockyards. We try to keep running repairs done by the permanent personnel, so that they are always available for it. But as the work load shifts and increases, that has to be put out to contract. We have a certain amount of work that is done in the dockyards. We have a good deal of equipment and machinery in those dockyards, and we try to keep it fully employed. But there is not a big enough establishment to do all the work which is required; so other work, such as the building of ships, goes out to the shipyards who are, of course, commercial enterprises.

The CHAIRMAN: Are there any further questions on page 300? Page 301. We are still on the same group, civil staff.

Mr. WEBSTER: Why is there an increase in hand brush painters?

The CHAIRMAN: That is about the fifth item.

Mr. PEARKES: These, again, are new positions brought about by the new system of having all entries come in as a general entry into the navy, and then to be allocated to different trades. There has been an attempt made to relate these trades to trades in ordinary civil life.

Mr. CHAMBERS: I notice a number of waitresses here, and that we also had a large number of food attendants. Is there a difference?

Rear Admiral R. A. WRIGHT (*Naval Comptroller*): Yes, a waitress is somebody who actually just waits on table, where a food service attendant is more of a pantry staff person.

The CHAIRMAN: Are there any further questions on page 301?

Mr. WEBSTER: These waitresses would be at Royal Roads, and in the different barracks at Esquimalt and Halifax?

Mr. PEARKES: Yes, they are on shore stations. They do not go to sea.

Mr. CHAMBERS: I notice a large number of riggers. Do they also substitute as chairmen of committees?

The CHAIRMAN: Just on Wednesdays. Are there any further questions on page 301? Page 302?

Mr. CARTER: The minister has said that he has no horses on the payroll, but I see there are two donkeymen. I wonder where they are located?

Mr. PEARKES: They are located adjacent to the donkey engines.

Mr. WEBSTER: They were all recruited in Newfoundland, were they not, sir?

Mr. CARTER: Are these employed in the yards to assist in loading ships?

Mr. PEARKES: Yes.

Mr. CARTER: Why are there only two?

The CHAIRMAN: They just have two donkeys.

Mr. PEARKES: We are able to get along with two very well, and there is no need to increase the establishment. The establishment committee has not recommended any increase in the number of donkey engine men.

The CHAIRMAN: Are there any further questions on page 302?

Mr. WINCH: On the lower part of the page we get into a number of different subjects.

The CHAIRMAN: Would you prefer that we take them up item by item?

Mr. HELLYER: No, let us take them all together.

The CHAIRMAN: Very well.

Mr. WINCH: I would like to ask if any real study has been made to try to cut down the travel and removal expenses? I see they are up to \$5,660,000 for this year, with an increase over last year.

The CHAIRMAN: The increase is \$166,000 for travel and removal expenses.

Mr. WINCH: That is a lot of money for travel and removal.

Mr. PEARKES: This item covers the cost of the services and civilian travelling, including the cost of moving the furniture and effects of the servicemen and their dependants on authorized moves.

The increase results from the estimated average strength increase of about one per cent in service personnel.

There are of course general increases in the rates for all kinds of travel.

We have now restricted or limited the amount which is paid for local moves, that is, within a station. But as far as the overall moves are concerned, there is an increase of \$166,000.

I can give you the breakdown of it, if you like. Service personnel, including movement of dependents and their effects, amounted to \$3,365,000.

Then there is temporary duty—that is, when the men are away from their homes on temporary duty; and that comes to \$997,000.

Then there is travel connected with attending various courses, both in Canada as well as outside, and that amounts to \$441,000.

Then there is transportation on leave, movement of new recruits and civilian travel and allowances. That includes transportation for children to and from the schools.

We have to provide transportation—and it is bus transportation usually; and that amounts to some \$3,000 for dependent children.



And then there is transportation in connection with the cadets of the three services to Royal Roads, which is administered by the navy.

Mr. WINCH: We are just discussing the navy, and that is all; yet we have over \$5,500,000 for travel and removal expenses. I do not know. It seems to me that there is a place where at least a special study should be made. By the time you get all three services together, the amount that is spent on transportation is terrific.

Mr. SMITH (*Calgary South*): With respect to the publications—

The CHAIRMAN: I am sorry. Is your question on travel?

Mr. SMITH (*Calgary South*): No, it is not.

The CHAIRMAN: Are you through, Mr. Winch?

Mr. WINCH: I would like to ask a final question: has any special study been made as far as this item is concerned as to the necessity or otherwise of this travel and removal?

Mr. PEARKES: Yes, there has been in the last two years a substantial reduction.

Last year there was \$5,530,228 actually expended. We try to police it as closely as we possibly can.

Mr. SMITH (*Calgary South*): I wonder if we could have an explanation of the anticipated savings due to staff turnover and delays in recruiting staff.

Mr. ARMSTRONG: The gross amount that is on the line above that is the total of the establishment. These establishments never are completely filled due to turnover of staff, and so on. Therefore, for the purpose of estimating, there is a deduction, which you see in that line, taken from the gross total.

The deduction is somewhat less this year because the establishments have been closer to being completely filled than they were in the year before. So, we expect to have slightly higher costs on account of having the establishments more nearly 100 per cent filled than they were in the last year.

Mr. SMITH (*Calgary South*): Do you anticipate, or have you seen any reduction in those recruiting costs—if this is in order—as a result of your efforts to combine some of your service recruiting.

The CHAIRMAN: We are having this recruiting information published, and I would suggest that we leave your question until that time. We possibly could discuss it back in item 1, if you wish.

Mr. Hellyer, I believe you had some questions?

Mr. HELLYER: Yes.

Would the minister give us an estimate of the effective life of the destroyer escorts?

Mr. PEARKES: Twenty years. That possibly may be extended another five years if major refits are carried out. However, the estimated life of destroyer escorts is 20 years.

Mr. HELLYER: That is just slightly higher than the estimate of the United States navy for its destroyers, which I think is about 14 to 18 years.

Mr. PEARKES: Well, there is a difference in the method of calculation.

Mr. HELLYER: Does the minister feel these destroyer escorts—

The CHAIRMAN: Just a moment, Mr. Hellyer. I am lost. Where do you find destroyer escorts on page 302? I believe you are on the wrong page entirely. Your vote is coming up on that.

Mr. HELLYER: That comes then on page 304; I am sorry.

Mr. WINCH: In connection with page 302, Mr. Chairman, could we have a brief explanation in connection with office stationery and supplies? I notice that is up.

Is it not possible to cut out some of this red tape and paper work, which I am told by members of the service is, in their opinion, quite often, absolutely unnecessary—and I notice they have an increase instead of a decrease here.

Has any kind of an efficiency survey ever been made to see whether or not there cannot be a saving made?

Mr. PEARKES: Yes, there is rather a small increase this year because of acquiring certain accounting machines, and we hope that will make a reduction in future estimates under this particular heading.

However, in connection with a lot of this work, we have to have a large number of returns to ensure proper accounting, and we have to supply these to various other government departments.

The CHAIRMAN: How much of the total is spent on equipment? Have you that information handy?

Mr. PEARKES: The amount actually spent on stationery and forms is \$750,000; accounting machines, \$210,000; office appliance purchases, \$96,300; materials for naval curator, \$100,000; books, drawings and specifications, \$68,500. Those are the main items.

The CHAIRMAN: Are there any further questions?

Mr. HELLYER: Is there anything included in any of these items for grants to service libraries?

Mr. PEARKES: Yes. That will come in at page 303, under "all other expenditures".

The CHAIRMAN: We will reach that in a minute.

Mr. SMITH (*Calgary South*): Could we have a breakdown of the nearly \$5 million of miscellaneous materials and supplies? I would just like information in connection with the larger items.

Mr. PEARKES: Yes. Materials for repair of ships and building maintenance, \$2,500,000; general consumer stores, \$1,874,000; fire prevention stores, \$140,000; packing and preservation supplies, \$150,000. Those are the main charges.

There is an item—delivery charges, customs and excise, \$75,000.

There is a decrease this year of \$166,000.

The CHAIRMAN: Are there any further questions?

Mr. MORTON: I notice that the continuing establishment of the navy remains about the same but, if you compare it to the other forces, you will note the army is reduced about 1,000, and the air force about 400.

Has any consideration been given to the possibility of being able to decrease the naval personnel?

Mr. PEARKES: No, I do not think there is any hope, as long as we have the present commitments, of reducing the naval personnel at all. We hardly have enough personnel to ensure the manning of the ships, if an emergency happens.

Mr. CHAMBERS: This is based on the civil staff.

Mr. PEARKES: The civil staff. Well, are you referring to civilian personnel?

Mr. MORTON: Yes. I am sorry; I should have defined it.

Mr. PEARKES: Of course, we have more ships in commission this year than we had a year ago.

The CHAIRMAN: Do you have many civilians on board ship?

Mr. PEARKES: No, we do not have any civilians on board ship; they are required for the maintenance.

Mr. CHAMBERS: Would that be of a temporary nature, or do you expect within a year or two that you will be able to decrease the civilian staff?

Mr. PEARKES: Perhaps Mr. Armstrong would answer your question.

Mr. ARMSTRONG: I would say, in this connection, the same kind of survey the minister has mentioned is undertaken in respect to the navy, army and air force. While this establishment remains the same, there has been some transfer to these continuing establishments, in terms of establishments, of a provision that formerly has been made as casual employment, and this has reflected, in terms of the estimates, in some reduction in the amount that otherwise would have been necessary under ship repair. So, while the numbers appear to be the same, there has been, in fact, by reason of that, a reduction of some 200 to 250 people—200 to 250 positions in the establishment that do not show up by reason of the explanation I have given you. They are reflected in a decrease elsewhere.

The CHAIRMAN: Are there any further questions on page 302?

Mr. WEBSTER: I notice by the fifth item up from the bottom of page 302 that your fuel bill is down by \$1,500,000, as estimated for this year.

Is that due to the reduction in the price of fuel, or what would be the reason for that?

Mr. PEARKES: If I recall correctly, there was a reduction of 35 cents on the fuel, and there has been rather less cruising done. Also, last year there was a substantial item there for building up a reserve of fuel.

Mr. CARTER: In exhibits, advertising and films—are these training films, or are they just advertising films?

Mr. PEARKES: They are naval films. There is a film which has been put out in connection with the regular officers' training plan, and this is the naval contribution towards that.

Mr. SMITH (*Calgary South*): Could I ask a question supplementary to that, Mr. Chairman?

The CHAIRMAN: By all means.

Mr. SMITH (*Calgary South*): Mr. Minister, do you not consider that this amount for exhibits, advertising, films, broadcasting and displays is really an amount which also should be calculated for recruiting?

Mr. PEARKES: It is included in the recruiting expenses.

Mr. SMITH (*Calgary South*): Might I ask how much of that amount was expended?

Mr. PEARKES: Of the total amount, last year there was \$200,000, and \$197,455 has been expended.

The CHAIRMAN: Are there any further questions, Mr. Carter, on that point?

Mr. CARTER: Not on the same point, Mr. Chairman; but on this same page.

The CHAIRMAN: Go ahead.

Mr. CARTER: I would like to inquire about the commissionaires. Are you employing the same number as formerly?

Mr. PEARKES: There has been some reduction in the number of commissionaires; but under the item of commissionaires are included such people as school teachers, and the number of school teachers has gone up considerably.

The increase that there is includes the provision of \$240,000 for the department's share of the salaries of teachers at the schools for the dependents of the servicemen.

That has become necessary because of the increase which was granted to teachers in the province of Nova Scotia by their provincial arrangements,



and we have to pay the same salaries to teachers in our service schools as are paid by the province in which they are located. We have no control over the actual amount paid.

Mr. CARTER: Are any commissionaires actually employed as teachers?

Mr. PEARKES: No commissionaires are employed as teachers; but teachers are included in this item. You see, the item reads, corps of commissionaires and other services.

Mr. CARTER: I see.

The CHAIRMAN: While we are on professional and special services, are there further questions on commissionaires, architects, medical and dental consultants—because I think we might have been wiser to go down item by item? It is rather confusing, as it is. Are there any further questions on that?

Mr. HELLYER: Does the navy have any publication of games and recreational facilities similar to that published by the Royal Canadian Air Force?

Mr. PEARKES: The navy publishes the *Crow's-Nest*, which is a magazine. I think they probably publish pamphlets on physical training and other activities.

The CHAIRMAN: Does the page carry, gentlemen?

Agreed.

The CHAIRMAN: We are on page 303, still on the same vote. Repairs and upkeep of buildings and works, including land: will that carry, gentlemen?

Agreed.

The CHAIRMAN: Rental of land, buildings and works—from \$80,000 up to \$100,000. Shall that item carry?

Agreed.

The CHAIRMAN: Repairs and upkeep of equipment—\$26,627,986, up to \$30,275,000. Mr. Hellyer, was it on that point that you wished to question?

Mr. HELLYER: Page 303, no.

The CHAIRMAN: Does that item carry, gentlemen?

Agreed.

The CHAIRMAN: Municipal and public utility services—from \$2 million to \$2,800,000. Are there any questions, gentlemen? May the item carry?

Agreed.

The CHAIRMAN: Pensions, superannuation and other benefits for personal services—it is just about on the nose. Shall the item carry, gentlemen?

Agreed.

The CHAIRMAN: All other expenditures. Carry?

Agreed.

The CHAIRMAN: Now we are on Royal Canadian Naval Reserve for the balance of page 303, as one item. Are there any questions, gentlemen?

Mr. SMITH (*Calgary South*): Mr. Chairman, I wonder if we could ask a general question of the minister. I propose to ask the same question under cadets. My question is, whether you are drawing any recruitment—any sizable recruitment—from either the naval reserve or the naval cadets into the permanent navy?

Mr. PEARKES: I have not the actual figures before me; but I can assure you that a very considerable percentage of the personnel who are joining the regular navy have had previous cadet or reserve training.

Mr. SMITH (*Calgary South*): Could I ask you, sir, for a future meeting—I think this would be useful on all three services, and I am just giving notice now—that the figures be provided. I believe they are available.

Mr. PEARKES: If they are available, we will get them; but I am not at all sure that they are.

The CHAIRMAN: Are there any further questions on page 303?

Mr. PEARKES: I have got it here on the sea cadets. Approximately 10 per cent of the new entries recruited into the Royal Canadian Navy are known to have received sea cadet training. I do not think we could possibly get it for the other services.

The CHAIRMAN: Are there any further questions on Royal Canadian Naval Reserve, page 303? May the page carry?

Agreed.

The CHAIRMAN: Now, the rest of this vote goes down to where you see the title, construction or acquisition of buildings, works, land and major equipment. We have, above that, travel and removal expenses; civil salaries, sea cadets. Are there any questions?

Mr. CHAMBERS: I wonder if the minister would care to give, on the sea cadets, the strengths this year and last year.

The CHAIRMAN: This is the Royal Canadian Sea Cadets.

Mr. PEARKES: On December 31, 1959, the enrolled strength was 10,201 cadets and 1,115 officers. I have not got last year's figures here.

The CHAIRMAN: Are there any further questions on sea cadets—or may the item carry?

Agreed.

The CHAIRMAN: Now we are on construction, a new vote, gentlemen. It is vote 221, construction or acquisition of buildings, works, land and major equipment. Item No. 1 is acquisition and construction of buildings and works, including acquisition of land: purchase of real properties (land and buildings), from \$50,000 up to \$125,000. Are there any questions, gentlemen?

221 Construction or Acquisition of Buildings, Works, Land and Major Equipment .....	\$74,259,000
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Mr. HELLYER: If sales of land come under this item, I wonder if the minister could bring us up to date about the shopping center at Shannon park?

Mr. ARMSTRONG: I can probably answer that. The arrangements in connection with the shopping center are still proceeding, although no actual construction has started on the site. There has been some levelling and perhaps some excavation at this point. Maritime Developments Limited, which has undertaken to build the shopping centre, have been having some difficulty in arranging a lease for the groceries. That has been holding up progress to some degree. I spoke to the principal of the company about two weeks ago. He told me that he had some hope of getting under way within about a month.

Mr. HELLYER: Was that company the original purchaser?

Mr. ARMSTRONG: The original transaction was not with that company. The agreement was the result of an assignment from the original company.

Mr. HELLYER: In the original agreement was there no protection in the case of default or bankruptcy that the agreement would be null and void.

Mr. ARMSTRONG: There were two protections in the agreement; one is that the land is only available for the construction of a shopping centre and the second is that the shopping centre must be commenced within a specified period.

Mr. HELLYER: The shopping centre in fact was not commenced within the specified period.

Mr. ARMSTRONG: This is a matter which is open to question. A contract had been let in respect of certain development on the property for the purpose of the shopping centre by the specified time.

Mr. HELLYER: But there is quite a difference between the letting of a contract and the commencement of construction.

Mr. ARMSTRONG: There had been actual work on the property, but no buildings actually had been started.

Mr. HELLYER: Was it not possible when the default was made for the department to call the contract null and void and call for tenders.

Mr. ARMSTRONG: Yes. It would have been possible to do that. The department, of course, was interested in having a shopping centre built. Some years ago a proposal was advertised to have a shopping centre built in that area. If I remember rightly this was two or three years ago and there were no tenders submitted nor was there any interest expressed in building a shopping centre there.

Mr. HELLYER: But the original proposal only called for the leasing of the land?

Mr. ARMSTRONG: Yes.

Mr. HELLYER: At no time has the department called for tenders.

Mr. ARMSTRONG: The department did not call for tenders in respect of this particular project. There was an arrangement made with the original company which undertook to build the shopping centre and the land was transferred to that company subject to a lien on the property that it must be used for a shopping centre.

Mr. HELLYER: When the original company defaulted did the department satisfy itself that there was no reason at that time to call tenders?

Mr. ARMSTRONG: The original company, while it ultimately went bankrupt, transferred or assigned the agreement before it went into bankruptcy.

Mr. HELLYER: And the agreement was assignable without any recognition?

Mr. ARMSTRONG: No. We considered it to be assignable only with the consent of the Department of National Defence.

Mr. HELLYER: But at that time you did not feel it was in the public interest to call for tenders or ask for new submissions?

Mr. ARMSTRONG: We did not decide to do so; no.

The CHAIRMAN: Construction of buildings and works. This is down from \$11,935,000 last year to \$5,104,000. Are there any questions?

Mr. CARTER: Was this achieved by deferring programs? Are there programs being deferred or contracts not being let? Is it a carry-over from previous years?

Mr. PEARKES: There is a carry-over to a certain extent: yes. There was some major construction going on on various sites. In Newfoundland at St. John's, there was \$100,000 of construction work going on there.

The CHAIRMAN: Are there any further questions on building and works? May the item carry?

Agreed.

The CHAIRMAN: Major procurement of equipment—ships.

Mr. HELLYER: I am wondering, Mr. Minister, if you can give us a little information about the effectiveness of the destroyer escorts in dealing with the most modern submarines of any potential enemy.



Mr. PEARKES: I can assure you that our destroyer escorts in the Royal Canadian Navy can be classified with the best of the surface vessels for submarine hunting that there are in any of the navies anywhere in the world. They are equipped with the most modern equipment for the detection and destruction of submarines that there is available anywhere. I have been present when senior officers of the other navies—the British and the United States—have visited our ships, and I have heard nothing but the highest praise for the type of ship and the equipment that there is in those ships.

Mr. HELLYER: Is it possible for the latest submarines to operate beyond the killing capability of any surface type vessel? In other words, are the latest submarines capable of out-running any surface vessel?

The CHAIRMAN: Latest submarines in which navy?

Mr. HELLYER: Any navy except ours.

Mr. PEARKES: We have no submarines in our Canadian navy, or attached to the Canadian navy, which could outrun our surface ships.

Mr. HELLYER: I think I can appreciate that.

Mr. PEARKES: One only can go by the speeds which are given in manuals such as Jane's Fighting Ships and there, I think, you will find that our destroyer escorts have a greater speed than that of any submarine which actually is in service at the present time.

Mr. HELLYER: At the present time; that would not necessarily apply to the latest submarines being built, including nuclear submarines.

Mr. PEARKES: Not necessarily, but I do not think there is any submarine at the present time which has as great or greater speed than our surface vessels.

Mr. HELLYER: Is there also a problem in depths with the latest type of submarine? If nuclear submarines are to be built which could operate against us, is there a problem of killing them at great depths.

Mr. PEARKES: Yes. There are considerable problems regarding both locating submarines at various depths and the destruction of those submarines.

Mr. HELLYER: Are the Russians—perhaps the minister would not care to answer that. However, certain information has appeared which would indicate that the Russian navy has been or could be at the present time building atomic submarines. What plans do we have in order to deal with those submarines? For instance, do we have any plans to acquire anti-submarine submarines?

The CHAIRMAN: Do you mean in 1960-61?

Mr. PEARKES: There is no money included in these estimates for the acquisition of submarines; but there has been a study—and money is provided for the continuation of that study—of different types of submarines.

Mr. HELLYER: Did you have any discussion with the Right Hon. Mr. Watkinson as to the possibility of exchanging atomic submarines with the British?

Mr. PEARKES: No. I am sure the British have no atomic submarines that they would be prepared to exchange with us.

The CHAIRMAN: Could we stick to procurement of equipment.

Mr. HELLYER: Does the minister think it would be necessary for us to acquire atomic devices for use by the Royal Canadian Navy, if they are to perform their role effectively in the decade which lies ahead?

Mr. PEARKES: As of today the Royal Canadian Navy has no means of discharging atomic weapons.

Mr. HELLYER: Does the minister think it will be necessary to acquire those in order to meet the threat of atomic submarines?

The CHAIRMAN: Mr. Hellyer, might I point out that we are working on the 1960-61 estimates—

Mr. HELLYER: Mr. Chairman, with deference—

The CHAIRMAN: Just a moment. I happen to be chairman of this meeting, and if you do not like the way I do it there is only one thing you can do, and that is to move that I get out of the chair; but as long as I am chairing the meeting I am going to chair it. At the present time we are discussing the procurement of ships for 1960-61.

Mr. HELLYER: I do not think you can say the discussion of the defence estimates should be limited to those things for which money is provided in the estimates. This is incredible. We can ask why—

The CHAIRMAN: You can ask why, but we are not building nuclear submarines at the present time.

Mr. HELLYER: That is quite right, but the minister indicated that a study is being carried out, and we would like to know whether or not there is the possibility of acquiring them.

The CHAIRMAN: Where is the item for the study?

Mr. CHAMBERS: This form of questioning would only be in order, I submit, under item 1, general policy.

Mr. HELLYER: There is another "rigger" pertaining to the procedure you yourself laid down at the beginning of the meeting.

The CHAIRMAN: I am a "rigger," and he is a "rigger." What are you?

Mr. CHAMBERS: He is a "holder on"!

Mr. WEBSTER: He is a "hammersmith"!

Mr. HELLYER: I am asking questions, trying to get information.

The CHAIRMAN: Item No. 1 is open, and you can get any information you wish to obtain when we go back to it.

Mr. HELLYER: Mr. Minister, I would like to know what research or technical work is being done by the Canadian Navy to provide torpedoes or homing depth-charges which would be effective at great depth against the latest submarine threat?

The CHAIRMAN: Just a moment, Mr. Hellyer. The item we are at the present time discussing is "major procurement of equipment—ships," and not depth charges.

Mr. HELLYER: If you look at the top of the paragraph you will find that the "major procurement of equipment" comes out to the left margin, and they are all related.

The CHAIRMAN: Yes, but we are doing "ships" at the present time.

Mr. HELLYER: These devices are sometimes launched from ships.

The CHAIRMAN: They are usually launched from ships. Have you any questions on the actual expenditure on ships—from \$29 million to \$40 million? If not, may the item carry?

Mr. CARTER: I would like to ask one question on that. Has any consideration been given to cooperating with the United States regarding the development and use of either atomic warfare submarines or conventional types? I mean anti-sub. subs.?

Mr. PEARKES: We have, under our research stations, a lot of research work being carried out in connection with underwater craft. Any information we get is made available to the United States and to the United Kingdom, and they exchange information with us; so there has been a lot of work done in that respect.

Mr. CARTER: Would it be possible for an integration of the conventional submarine and the atomic submarine? I mean, would it be possible to have a conventional anti-sub. sub. which could be integrated with atomic subs.?

Mr. PEARKES: I do not know how you are going to integrate a conventional submarine with an atomic submarine.

Mr. WEBSTER: He wants to breed them!

Mr. PEARKES: They are complementary, one with the other. There are ordinary conventional submarines, which are a useful type of vessel in anti-submarine warfare.

Mr. CARTER: What I am trying to get at is that both types are really necessary as a defence against submarines.

Mr. PEARKES: Both types are used in some navies. In the United States navy both types are used.

Mr. WINCH: In exercises which I understand have been held, how effective were these destroyers in being able to locate and destroy a submarine in preventing it from getting in a position where it would be capable of firing an atomic missile, which we understand some submarines are now capable of doing? In the exercise how effective was it in locating and destroying such submarines?

Mr. PEARKES: A number of NATO exercises have been carried out in conjunction with not only the navy of the United States but with the British Navy and some of the other NATO navies. The reports that I have received have again and again referred to the effectiveness of our surface vessels. These surface vessels work in conjunction with aircraft, with helicopters and with submarines in the detection of simulated hostile submarines.

Mr. SMITH (*Calgary South*): Could I ask a supplementary question to that?

The CHAIRMAN: Yes, Mr. Smith?

Mr. SMITH (*Calgary South*): It has been stated from other sources that the gap between the potential enemy submarine and the surface craft which are being used by the western world today is sizable—which is rather a large term. You rather disagree with that statement, and you think the gap is relatively small between surface vessels such as the *Restigouche* or *St. Laurent* destroyer, plus air support, in matching the competence of the Russians' under-surface ships?

Mr. PEARKES: I think in order to present as effective a defence as possible against hostile submarines you require a variety of defensive equipment. Surface vessels are certainly one of the component parts. If they are operating in conjunction with other submarine and with aircraft they are more effective than if they are working alone. That is one of the reasons why we have placed so much emphasis on our maritime air command, where our Argus aircraft work in the closest conjunction with our surface vessels.

Mr. SMITH (*Calgary South*): You are then satisfied, I gather, that the combination of airborne and surface ships we have today is competent to meet an attack of the potential aggressor's submarine fleet?

Mr. PEARKES: I am certain that the combination of our surface vessels and our aircraft can play a very important part in detecting and destroying submarines. I believe that it would be helpful to have submarine devices, in the way of submarines of another fleet, cooperating with us to increase that effectiveness. I feel quite certain that if there were submarine threats off our Atlantic coast, SACLANT would be able to supplement our surface vessels with submarines from the United States Navy.



Mr. WEBSTER: I wonder, Mr. Chairman, if now is the time to ask the question I asked at the beginning of the meeting? Could the minister tell me how many of these D. E. ships he expects to have at the end of this present building program?

Mr. PEARKES: We have six of the *Restigouche* type ship under construction now; there were seven *Restigouche* type ships that were commissioned last year, and there are seven of the *St. Laurent* class ships provided for.

Mr. WEBSTER: That makes a total of about 20. I would like to ask a supplementary question. Can you tell me the number of ships which we are committed to supply to NATO?

Mr. PEARKES: We are committed to 30 ships.

Mr. WEBSTER: Is it your intention to make the old Tribals available to bring the strength up to 30 in view of the fact that there are only 20 new ships planned?

Mr. PEARKES: Included in the 30 ships is the *Bonaventure*, and other ships on the Atlantic coast, in order to bring up the number.

Mr. HELLYER: From what you said a moment ago, Mr. Minister, in respect to the assistance from the United States submarine fleet, I assume you think that it would be helpful if we had submarines, but obviously the reason we have not is because of the high cost; would that be correct?

Mr. PEARKES: The cost of submarines is very high, particularly of the atomic type.

Mr. HELLYER: Are the anti-submarine destroyer escorts capable of being used as launching bases for the Polaris missiles?

Mr. PEARKES: I do not think so, no.

Mr. HELLYER: We have, then, no surface vessels, with the possible exception of the *Bonaventure*, which would be capable of being used as launching bases for the Polaris missile?

Mr. PEARKES: It is not Canadian naval policy to provide launching bases for Polaris missiles at the present time.

Mr. HELLYER: What anti-aircraft protection do these destroyer escorts have, and is any change contemplated?

Mr. ARMSTRONG: The destroyer escorts are armed with three inch-fifties, and three inch-seventy anti-aircraft guns. Studies are being undertaken by the navy with respect to some future anti-aircraft weapons.

Mr. HELLYER: Are these weapons not obsolete, or obsolescent at the present time as anti-aircraft defence against modern aircraft?

Mr. PEARKES: I do not think you can say they are obsolescent.

Mr. HELLYER: Does the minister not feel that some anti-aircraft missile would be required to give the ships adequate air protection?

Mr. PEARKES: I do not think we have under consideration any missile to be fired from the destroyers. We have the *Banshee* which is operational, and she will be operational for several more years. We will probably have to give consideration to this change in the type of anti-aircraft defence for our ships at some future date.

Mr. CHAMBERS: Mr. Chairman, I would like to ask a supplementary question. Surely it is not expected that one of the more likely types of attacks on North America would be a fighter attack or a bomber attack.

Mr. PEARKES: It would be under, I should think, very exceptional circumstances that our vessels would be engaged in a fighter attack. If our vessels were employed in the protection of the north Atlantic shores, the distance is too great to expect a fighter attack there. We do supply other protection with the anti-aircraft guns, from what I have seen of them.

Mr. HELLYER: Would these same ships be vulnerable to an air to ground missile launched by a bomber?

Mr. PEARKES: If an air to ground missile were launched against a ship, of course, it is vulnerable. It would have to take evasive action. There is nothing, that I know of, that can protect a ship or anything else against a missile, once it has been launched.

Mr. HELLYER: That may be true, except the shooting down of a bomber before it launched the missile, and that is the reason I raised the question of the anti-aircraft missiles.

Mr. PEARKES: We have fighters on the carrier.

Mr. CHAMBERS: Would it not also be true, Mr. Minister, that in a general engagement on the Atlantic coast, the Canadian navy would be working with other navies, which do have aircraft carriers, in order to provide air defence for the fleet in general?

Mr. PEARKES: Yes. The principal role of the Canadian navy is to provide an anti-submarine element by surface vessels and by marine aircraft. That is the main role of the Canadian navy.

Mr. WINCH: I presume an aggressor would not give any warning of a submarine attack which, we understand, would consist of firing missiles from beneath the surface; and because of the fact that we would not have a warning, are the destroyers on constant patrol?

Mr. PEARKES: There are Canadian ships on constant patrol. There are ships on four-hour call at all our navy ports.

The CHAIRMAN: Gentlemen, may we have some questions in regard to the procurement of ships?

Mr. CARTER: I would like to ask a question for clarification. I take it from what the minister has said that no consideration is being given at the present time by the Canadian navy to the procurement of conventional anti-submarine subs?

Mr. PEARKES: I did not say that. I said that we had teams who were examining all aspects of this problem. There is no provision in this year's estimates for money to be provided for the procurement of such anti-submarine subs, but I did not say there was no consideration being given to this. I have said in the House of Commons before that we have been examining and giving consideration to this problem for some considerable time.

The CHAIRMAN: There is no money included in the \$40 million for this?

Mr. PEARKES: No.

Mr. WEBSTER: May I ask where these six new ships are being built?

Mr. PEARKES: Yes, I have got that information here.

The *MacKenzie* is being built at the Canadian Vickers plant in Montreal. Construction was commenced in October, 1958.

The *Saskatchewan* is being built at the Victoria machine shop at Yarrows Limited in Vancouver, and construction was started in August, 1959.

The *Yukon* is being built at the Burrard drydock in North Vancouver and was commenced in October, 1959.

The *Qu'Appelle* is being built at the Davies ship building yard at Lauzon, Quebec. That was started in January of this year.

The *Annapolis* is being built at the Halifax ship yard. That was started in April of this year.

The *Nipigon* is being laid down at Sorel, Quebec. Construction on that ship is to start this summer, if it has not already started.

The CHAIRMAN: Can we carry that item, gentlemen?

Agreed to.

Mr. HELLYER: Are you referring to the one item, Mr. Chairman?

The CHAIRMAN: We are referring just to that one item.

Now we can move to our consideration of aircraft. There has been a drop here from \$23,497,000 to \$1,768,000.

The CHAIRMAN: Are there any questions, gentlemen?

Mr. WINCH: I would like to ask if that aircraft has some kind of weapon for detecting submarines underneath the surface.

Mr. PEARKES: Yes. That would be the Tracker, and it is equipped to detect submarines below the surface.

Mr. SMITH (*Calgary South*): What aircraft are involved in this item, Mr. Minister?

Mr. PEARKES: The aircraft involved are the Tracker and the Banshee.

Mr. SMITH (*Calgary South*): Are those the only two types included in this item?

Mr. PEARKES: Actually in the estimates the Banshee has been provided for, and this is just for the provision of CS2F's, and the Trackers.

Mr. SMITH (*Calgary South*): Is there any suggestion sir, for providing any modification or new aircraft for the carrier?

Mr. PEARKES: No, not in this year's estimate, because the Banshee and the Tracker are both considered operational.

The CHAIRMAN: Are there any further questions?

Mr. PEARKES: We have only just completed the delivery of the Tracker.

Mr. HELLYER: Has the Banshee been equipped with the Sidewinder missile?

Mr. ARMSTRONG: Yes, it has.

Mr. PEARKES: Yes.

Mr. HELLYER: How many helicopters, if any, are included in this item?

Mr. PEARKES: I do not think there are any.

The CHAIRMAN: There could not be very many at that price anyway.

Is the item agreed to?

Agreed to.

Next is mechanical equipment including transportation, \$1,250,000 down to \$936,000. Are there any questions?

Agreed to.

Next is armament equipment from \$7 million down to \$5,400,000. Are there any questions?

Mr. HELLYER: Either under this item or the following one I would like the minister to say whether or not in his opinion it will be necessary to give the Canadian navy nuclear capability within the next few years—three or four years—to keep it effective?

The CHAIRMAN: I do not think that will come under armament and equipment. May we get over this item? Are there any questions on armament and equipment?

Agreed to.

Electronic and communication equipment?

Mr. CARTER: Under this item is there anything for the new devices to detect submarines at very low depths? I understand there are new devices.



Mr. PEARKES: There is a new device known as the variable depth sonar. Because there are different layers in the ocean, the sonar can be lowered through those different layers and can get a very much better reaction.

Mr. CARTER: Are we procuring any of these new instruments?

The CHAIRMAN: In the \$12 million?

Mr. PEARKES: Yes. There is money in this item for the procurement of these.

The CHAIRMAN: Are there any further questions on electronic and communication equipment?

Mr. HELLYER: I wonder if there is any new communication equipment, particularly relating to communication, for example, with submarines which might be operating under SACLANT—American submarines which might be operating under SACLANT?

Mr. PEARKES: Yes. There is a considerable sum of money included for communication equipment here—radio communication equipment, transmitters and receivers for ships and so on. There is \$3,900,000 there; and for radar equipment, and navigational research, and identification equipment, \$762 million.

The CHAIRMAN: Are there any further questions?

Mr. CHAMBERS: What was that figure, again?

Mr. PEARKES: \$762 million; and for aircraft and electronic equipment there is \$1,295,000.

Mr. CHAMBERS: Did you really mean to say \$762,000?

Mr. PEARKES: Oh yes, \$762,000.

Mr. CHAMBERS: I thought you said millions.

Mr. PEARKES: I am sorry if I did.

The CHAIRMAN: Are there any further questions on electronic and communication equipment, or may the item carry?

Agreed to.

Special training equipment up from a quarter of a million to \$1 million. Are there any questions?

Mr. CARTER: What is involved in this? Are there some new branches of the service?

Mr. PEARKES: The increase in this item reflects the inclusion of various types of training equipment such as navigational trainers. There is one being installed in Halifax this year.

The CHAIRMAN: Are there any further questions?

Agreed to.

Miscellaneous equipment?

Mr. SMITH (*Calgary South*): You made a \$1 million reduction in this item this year. How did you do it?

The CHAIRMAN: It is down from \$2,500,000 to \$1,500,000.

Mr. HELLYER: What other vote is it under?

Mr. PEARKES: There was a very considerable decrease from \$406,000 to \$100,000 in band instruments, for instance.

Mr. SMITH (*Calgary South*): Did you say band instruments?

The CHAIRMAN: Yes, wind instruments.

Mr. PEARKES: That is one major decrease.

Mr. SMITH (*Calgary South*): What was the amount?

Mr. PEARKES: From \$406,400 to \$100,000; band and other instruments.

The CHAIRMAN: May the item carry?

Agreed to.

Ammunition and bombs?

Mr. HELLYER: Under this item would the minister answer my previous question about the necessity for atomic capability in the Canadian navy?

Mr. PEARKES: There is no provision made in this estimate for atomic weapons in the navy.

Mr. HELLYER: I fully appreciate that; but we are voting money now for future years; I refer to the ship building program, which will go on, and to commitments with respect to ships; and for many of these things involved we are making commitments now which sort of set the policy for the navy's course for the next several years.

I wonder if the minister can foresee within the period of three or four years the necessity for atomic capability for the Canadian navy, if it is going to be of any real effectiveness in the Atlantic area?

Mr. PEARKES: The Royal Canadian Navy in three or four years time may have atomic capacity.

At the present time we have no weapons in the Canadian navy which can launch weapons with nuclear warheads. Modification would be required to the various types of weapons that we have before they could be launched with nuclear warheads.

Mr. HELLYER: If this were to be the case, would those weapons be under NATO control, under NATO agreement, or would they be separate, under a Canadian-American agreement?

Mr. PEARKES: I think the Prime Minister gave you a very clear answer the other day.

Mr. HELLYER: This is sort of a hybrid problem, when you have the navy which is at one minute under Canadian control and the next minute under SACLANT.

The CHAIRMAN: Let us get down to the item of ammunition and bombs. May the item carry?

Agreed to.

Mr. CARTER: Before the general item 221 carries, I note there is a reduction of \$20 million as compared to last year. I would like to ask the minister if that decrease in the procurement estimates has been made possible by past procurement?

The CHAIRMAN: That is the total vote?

Mr. CARTER: Yes.

Mr. PEARKES: Did you say by past procurements?

Mr. CARTER: Yes.

Mr. PEARKES: There are some purchases which have been completed now, and no further money is required for them. One thinks of aircraft, and of ships which have been built; and one thinks of the cost in connection with the *St. Laurent* class which has now been finished.

We have finished our procurement of the Tractor aircraft, while the Banshee is practically finished. And there have been buildings constructed.

Mr. CARTER: I am thinking mainly of the equipment, not the land; and what I was wondering about was whether proper regard is being given to the question of obsolescence, and that we might have a lot of obsolescent equipment for which we might have to pay even higher. The bulk of this saving is in connection with the purchase of aircraft. We have just completed the purchase of the Tractor aircraft, and that having been completed and paid

for, there is not the intention at the present time, or the need, to replace that aircraft. Therefore, it has been possible to make a very considerable saving in this respect.

Item 221 agreed to.

The CHAIRMAN: Gentlemen, what is your wish? It is now 5.05. We could get through a few pages in connection with the Canadian army, or we could adjourn at this time until tomorrow afternoon at 3.30, at which time we will have another meeting.

Mr. HELLYER: Mr. Chairman, I think this would be a convenient place to leave off for the day.

The CHAIRMAN: Is that your wish, gentlemen? Is everyone agreed?

We will meet again tomorrow afternoon at 3.30.

—The committee adjourned.



## APPENDIX "A"

6 Jul 60

## ARMED FORCES RECRUITING

1960/61

1. This paper outlines the recruiting operations of the RCN, CA(R) and RCAF recruiting establishments, manpower requirements and recruiting costs.

*Enrolment Standards*

2. With the exception of Tri-Service programmes such as ROTP and 45 Month Medical Subsidization each Service sets its own enrolment standards. These standards differ in accordance with the specific requirement of each Service. The Army alone has 219 trades and specialities for other rank enrolments.

3. The modern technical nature of the Armed Forces places an increasing emphasis on quality in the selection of recruits. The recruiting task is accordingly more formidable especially in securing officer applicants and applicants for the technical trades. These applicants come from a limited pool of manpower in which there is also increasing competition from civilian industry.

*Manpower Requirements*

4. The total Armed Forces recruiting target for officers and other ranks in 1960/61 is 14,234 consisting of 2,975 RCN, 6,501 CA(R) and 4,758 RCAF. In view of the fact that each Service is close to its ceiling, these targets reflect the need to replace attrition.

5. Experience has shown that approximately five applicants are interviewed for every enrollee, therefore the Services would have to interview approximately 70,000 applicants to reach their target.

*Organization*

6. Each service differs in the operation and control of its recruiting organization. The RCN maintains operational and administrative control in Naval HQ; however, recruiting personnel are borne on the establishment of the nearest Naval Division for pay and discipline. The Army with geographically located commands delegates the responsibility for recruiting to the General Officer Commanding Commands who in turn re-delegate this responsibility to their Area Commanders. The RCAF is organized on a functional basis: Training Command, Maintenance Command etc. This necessitates recruiting organization, administration and functions to be controlled by AFHQ.

7. The RCN and RCAF Recruiting Stations do complete processing of applicants including attestation whereas the Army Recruiting Station does only basic screening. Documentation and attestation are done at 12 centrally located Personnel Depots operating under Command control. These Personnel Depots in addition to enrolment of recruits are also required to perform many other functions such as release of personnel, re-allocation of personnel, handling of overseas drafts etc.

8. Tri-Service Recruiting Stations (Canadian Armed Forces Recruiting Centres) are now being formed in the larger cities across Canada. Eight CAFRCs are now in operation in Victoria, Edmonton, Winnipeg, Fort William, Hamilton, Kingston, Ottawa, St John NB and during 1960/61 CAFRCs will be formed in Vancouver, Calgary, North Bay, Windsor, Toronto, Halifax and

St Johns Nfld. CAFRCs provide common accommodation for the three Services and in most cases they are located in Crown accommodation. Every effort is being made to reduce the amount of leased accommodation now occupied by the three Services.

### *Establishments*

9. The RCN and RCAF include in their recruiting establishments recruiting stations and that portion of the staff at Naval HQ and AFHQ which is directly concerned with recruiting and the Army includes also Command and Area Manning staffs and the portion of Personnel Depots which is directly concerned with recruiting.

10. The following is the Service breakdown of recruiting establishments:

RCN		CA(R)		RCAF	
Capt	— 1	Col	— 1	G/C	— 1
Cdr	— 1	Lt-Col	— 4	W/C	— 1
L/Cdr	— 10	Maj	— 13	S/L	— 6
Lt	— 21	Capt	— 18	F/L	— 65
CPO 1	— 11	Lt	— 46	F/O	— 4
CPO 2	— 11	SSgt	— 2	Sgt	— 23
P 1	— 16	Sgt	— 107	Cpl	— 25
P 2	— 5	Cpl	— 15	LAC	— 40
LS	— 8	Pte	— 11		
AB	— 4				
	<hr/>		<hr/>		<hr/>
	88		217		165

### *Recruiting Costs*

11. The items by services are summarized as follows:

	RCN	CA(R)	RCAF
Advertising .....	200,000	600,000	500,000
Pay and Allowances ..	502,500	1,002,984	805,344
Accommodation .....	43,413	205,000	97,980
Travel, Medical and			
Other Costs .....	290,600	415,000	355,676
	<hr/>	<hr/>	<hr/>
	\$ 1,036,513	\$ 2,222,984	\$ 1,759,000

12. Each recruiting station has a territory for which it is responsible. The staff must tour this zone and seek out prospects for enrolment. This is accomplished by building good community relations, developing centres of interest, giving talks in high schools, service clubs, PTA meetings, visiting homes and presenting the advantages of Service life to those who can influence desirable prospects as well as to individual prospects. For this purpose each service operates a number of recruiting vehicles.

13. A total of \$1,300,000 has been provided in the Services estimate (Primary 10) for recruiting advertising. RCN \$200,000; CA(R) \$600,000 and RCAF \$500,000. This has been reduced from a total of \$2,427,000 allotted for recruiting advertising in 1955/56. Attached at Annex "A" is the Armed Forces recruiting advertising programme for 1960/61.

14. The advertising provided in support of recruiting is balanced. Experience has shown in general that there is no one advertising or publicity medium which can be singled out as being more effective beyond others. Each medium has its own place, supporting and being supported by the rest.

15. Published advertising for the Services includes daily, weekly and week-end editions of newspapers, farm and school papers, high school annuals, national magazines, selected trade publications, radio and TV commercials, transport advertising and the rental of space facilities or services. Media are selected to achieve maximum economical coverage for the intended audience and vary by Service within the limitations of advertising budgets. An example of the costs for the use of various media is attached at Annex "B".

16. In addition to advertising media, recruiting advertising funds are utilized for the production of recruiting literature, pamphlets, brochures, posters, films and displays for fairs and exhibitions.

### Summary

17. Each Service is constantly reviewing establishments, systems of recruiting and operating costs with a view to making reductions where possible and practical. The 1960/61 estimates as herewith presented show an overall reduction of \$487,368 over the expenditures for 1959/60. Studies are also being continued to determine areas where greater uniformity may be possible to reduce costs.

## ANNEX "A"

### COMBINED TRI-SERVICE AND SINGLE SERVICE PROGRAMMES OF ARMED FORCES RECRUITING ADVERTISING

	1960-61 Planned Programme
(1) National Agencies	
(a) Newspapers—dailies.....	\$ 126,002.51
—weeklies.....	16,369.00
(b) Weekend Publications.....	158,890.97
(c) Magazines.....	139,037.00
(d) Radio.....	19,066.80
(e) TV.....	41,325.00
(f) Miscellaneous Publications.....	31,807.06
(g) Monthly Farm Papers.....	7,788.10
(h) School Publications.....	41,525.01
(i) Printing.....	81,094.14
(j) Production.....	75,389.51
(k) Transit Cards, Direct Mail, etc.....	24,200.00
(l) Reserve for Rate Changes.....	12,504.90
(m) Recruiting and Command Units (newspapers, radio, TV).....	223,000.00
	<hr/>
	\$ 998,000.00
(2) Non-Agency	
(a) Command and Local	
—Regular Force.....	\$ 69,000.00
—Reserves, Militia.....	41,000.00
	<hr/>
Sub-Total of (a).....	\$ 110,000.00
(b) General	
Printing by Queens Printer.....	\$ 17,000.00
—Film.....	59,500.00
—Exhibitions.....	90,000.00
—Displays.....	17,500.00
—Miscellaneous.....	8,000.00
	<hr/>
Sub-Total of (b).....	\$ 192,000.00
TOTAL of (2).....	<hr/>
	\$ 302,000.00
GRAND TOTAL (1)—(2).....	<hr/>
	\$ 1,300,000.00



## ANNEX "B"

## EXAMPLE OF ADVERTISING MEDIA COSTS

1. Advertising costs are based primarily on the circulation achieved and the time and space purchased in any medium for space costs. Additional basic production costs are involved in the make-up of printed advertising or prepared material for radio, TV and miscellaneous outlets. These costs, therefore, vary considerably by media and the following outline of costs is an average for normal advertising schedules of combined French and English language rates.

2. Newspapers		
(a) Classified Advertising Space		
One insertion of 90 lines in 21 selected daily newspapers.....	\$ 27,130.95	
Minor production costs for make-up of proofs to be sent to newspapers	\$ 50.00	
(b) Display Advertising Space		
One insertion of 315 lines (including illustrations) in 5 selected daily newspapers.....	11,599.88	
Production costs for art work, typeset, engraving and mats vary up to	\$ 900.00	
3. Farm Papers		
One insertion of 315 lines (including illustrations) in four nationally distributed farm papers.....	2,189.25	
Production costs for layout engraving and mats vary up to.....	\$ 500.00	
4. Weekend Supplements to Daily Newspapers		
One insertion $\frac{1}{2}$ page in 2 publications (Weekend Magazine and Star Weekly).....	6,410.00	
5. Magazines		
Macleans one insertion $\frac{1}{2}$ page colour ad.....	2,620.00	
Liberty one insertion $\frac{1}{2}$ page colour ad.....	3,020.00	
Readers Digest one insertion one page colour ad.....	3,132.00	
Production costs for conversion of basic material engraving and make-up vary up to.....	\$ 500.00	
6. Radio		
A one minute spot on all major radio stations.....	2,900.00	
Production costs for preparing discs, talent, studio time, music rights and pressings vary up to.....	\$ 1,200.00	
7. Television		
A one minute spot on all major TV Stations.....	2,700.00	
Production costs for preparing one minute films, studio, talent, music rights and prints vary from \$3,500 to \$15,000 depending on techniques used, such as animation or actuality shooting, and whether existing stock film footage is available or on location shooting must be done.		

## APPENDIX "B"

Requested by Mr. M. Lambert

## DND—CONSTRUCTION ENGINEERING DESIGN STAFFS AND CONSULTANTS

	No. of Personnel MILITARY	No. of Personnel CIVILIANS	Est Cost Salaries MILITARY Pri 03	Est Cost Salaries CIVILIANS Pri 01	Cash Provision for Outside Consultants Pri 41	Total Cost
			\$	\$	\$	\$
NAVY	Nil	23	Nil	149,190.00	250,000.00	399,190.00
ARMY	10	55	68,000.00	351,000.00	900,000.00 (A)	1,319,000.00
RCAF	35	84	193,000.00	600,000.00	2,300,000.00 (B)	3,093,000.00
	45	162	261,000.00	1,100,190.00	3,450,000.00	4,811,190.00

NOTE (A)—Includes provision for 7 employees of consultant firms hired for special projects.

NOTE (B)—Includes provision for 14 employees of consultant firms hired for special projects.

July 6, 1960.

## MINUTES OF PROCEEDINGS

House of Commons, Room 238-S.

THURSDAY, July 7, 1960.

(20)

The Special Committee on Defence Expenditures met at 3.30 o'clock p.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Halpenny, Hellyer, Lambert, Macdonald (*Kings*), Morton, Parizeau, Roberge, Smith (*Calgary South*), Spencer, Winch.—12.

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Colonel F. E. Anderson, Director of Army Budget; Mr. D. B. Dwyer, Superintendent, Parliamentary Returns.

The Committee resumed from Wednesday, July 6, consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61.

Mr. Pearkes and Mr. Armstrong were again questioned.

Items 222 and 223 were approved.

And consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61 still continuing, it was adjourned until the following meeting.

At 5.30 o'clock p.m. the Committee adjourned to meet again at 9.30 o'clock a.m. tomorrow, Friday, July 8.

Antoine Chassé,  
*Clerk of the Committee.*





## EVIDENCE

THURSDAY, July 7, 1960.

3.30 p.m.

The CHAIRMAN: Gentlemen, we have a quorum. Thank you all for being on time. Today we start on page 305 with the Canadian army. That is vote 222, and we shall continue on that vote until the bottom of page 213.

### CANADIAN ARMY

Item 222. Operation and Maintenance ..... \$536,737,000

Mr. WINCH: I am a curious individual. Might I ask the minister what is the work and responsibility of 21 professors, seven associate professors, and 22 assistant professors in the Canadian army?

Hon. G. R. PEARKES (*Minister of National Defence*): Those are professors at the Royal Military College; they are the teaching staff of the Royal Military College.

Mr. WINCH: And they are civilians?

Mr. PEARKES: They are civilians.

The CHAIRMAN: Are there any further questions on page 305?

Mr. WINCH: I would like to ask, on the same point, what is their special study? If they are professors at an army college, what do they teach? You have 21 professors, seven associate professors, and 22 assistant professors.

Mr. PEARKES: The Royal Military College is now a degree granting institution; and when a young man completes his course at the Royal Military College he may get a degree in arts, in exactly the same way as if he had gone to the university of Toronto, or to the university of British Columbia.

And the same thing applies in connection with science; they are taught not only English and French, and the usual things which are taught in an arts course, but they also have physics, chemistry, and they have engineering.

Until the Royal Military College became a degree granting institution, any university in Canada accepted the four years at Royal Military College as being equal to three years of ordinary university training.

So it is far more than a precise military school where they are taught only drill and tactics. The boys there get a general education in arts, engineering, chemistry, and physics; and all those subjects which are considered necessary for them to have a real foundation in engineering, physics and so on, before they enter into the services.

Mr. WINCH: I can understand that with engineering, and with physics, and perhaps with chemistry. But please explain to me why under the army, at a military college, you can get a bachelor of arts degree in arts? Just why?

Mr. CHAMBERS: They are educated men in the services.

Mr. WINCH: Just why do you not take them from the university?

Mr. PEARKES: We do take some from the universities. There are two schemes: there is the service college scheme, and then there is the R.O.T.C. scheme at the universities, where the boy indicates that he wishes to go into the services, and he is assisted through university, and then gets a commission in the regular forces.

Mr. SMITH (*Calgary South*): Was not part of the reason the fact that you recognized that some of these young men, after they had completed their education in terms of military service, would then be better equipped to enter into the competitive business world; and that this, in turn, attracted a higher standard of student into the college, and made them available, of course, for military service, if required?

Mr. PEARKES: Yes. The purpose, of course, is to train officers for the services, and after completing their scholastic training at the Royal Military College they are obliged to serve for a certain number of years in the regular forces.

Mr. SMITH (*Calgary South*): Are you planning to expand it?

Mr. PEARKES: They are encouraged to make the services a career.

Mr. SMITH (*Calgary South*): I realize that, but I do not believe you actually induct all your graduating class into the armed services?

Mr. PEARKES: All the men go into the armed services for a period of from three to four years, as a minimum.

Mr. SMITH (*Calgary South*): That is right. I appreciate that. But are you planning to expand the courses in which a cadet can obtain his degree? There are I believe two such courses now.

Mr. PEARKES: Yes, they are expanding so as to give engineering degrees within the next two years.

Mr. SMITH (*Calgary South*): Is there anything over and above that currently, I mean, beyond arts and engineering?

Mr. PEARKES: There is arts and science, and it is not intended to go into any other fields immediately.

The CHAIRMAN: What about Royal Roads and the Collège Militaire?

Mr. PEARKES: They are preparatory courses for Royal Military College. They had two years at Royal Roads, and then two more years at Royal Military College; and at the Collège Militaire they take in a young man a year before he will get his senior matriculation, and they give him an opportunity. A large percentage of them are French-speaking boys, and it gives them an opportunity to learn to speak English. So they have two years; the first two years of the college training, and then they go to the Royal Military College for the third and fourth years.

The CHAIRMAN: In your fifth year in engineering, for example, after you have your four years which is the equivalent of a liberal arts course, and you want to finish up in engineering, does the army pay for that?

Mr. PEARKES: It is now arranged that they will be able to get their engineering degree at Royal Military College. Until this year they have had to go to a recognized university, where the army paid for them at that recognized university.

Mr. WINCH: The army will pay for a man to go for five years to college as long as he signs up and commits himself for three years in the services afterwards?

Mr. PEARKES: It is four years.

Mr. WINCH: The army pays for five years?

Mr. PEARKES: The army pays for four years, and only in very special cases are they allowed to take another year at university. That is the present system.

But before we got the opportunity to graduate or to grant a degree, it was necessary for a young man, after completing his four years, to go on to university, thus making the five years that you are referring to. Henceforth it will be a four-year course.

Mr. WINCH: How do you decide as to whom should receive up to five years of college education, to emerge with a degree, and only to have spent four years in the services?

Mr. PEARKES: It would only be in a very limited number of cases that an outstanding cadet would be recommended to go on to obtain his master's degree.

The CHAIRMAN: It depends on their scholastic ability?

Mr. PEARKES: It is based entirely on those who have outstanding ability.

Mr. ROBERGE: I want to know if the professors referred to on page 205 are all at Kingston, or if some of them are at Royal Roads

Mr. PEARKES: Royal Roads is administered by the navy, while Collège Militaire is administered by the air force; and these professors are at Royal Military College, which is administered by the army. So this is the teaching staff at Royal Military College only.

Mr. WINCH: Might I ask how many students you will have in the course this coming year at Royal Military College?

Mr. PEARKES: Last year, 1959-60, there were 427, and three extra, making a total of 430.

Mr. ROBERGE: Since the minister has spoken of the Collège Militaire, is it the intention of the government to extend the courses at St. Jean, or to keep them as they are now?

Mr. PEARKES: To extend the course at the Collège Militaire at St. Jean would incur fairly considerable capital outlay; and while active consideration is being given to see whether we can fit into our budget the funds necessary for the expansion, the three year course is going on. But very careful consideration is being given to it.

There have been recommendations received from various quarters, urging that the Collège Militaire should be extended so as to give the whole four year course.

One disadvantage which is liable to occur would be the lack of the intermingling of cadets, and there are several schemes for intermingling of French and English speaking cadets, and that is something we want to have carried out. There are several schemes now, and very active consideration is being given to see whether we can carry it out.

I do not think it would be possible to do it this next year, because the plans are all made. But I hope—we are looking into it very carefully to see whether it is practical to extend it.

Mr. CARTER: I am interested in the engineering degree which Royal Military College confers now. Is that a general engineering degree, a civil engineering degree, or is it specialized? Can you get a special degree in, let us say, chemical engineering, or electrical engineering?

Mr. PEARKES: No. I think it is a degree in general engineering.

The CHAIRMAN: Are there any further questions on page 305?

Mr. LAMBERT: I was not able to be here yesterday, so I was not able to get the information which I understand was filed by the minister in answer to my earlier question in connection with architects and engineers.

I would like to know why the army requires 14 architects, bearing in mind that there are architects at defence construction.

Mr. PEARKES: The number of architects, I think, has been increased; but the need for them at the present time is the work which the army is doing in connection with survival operations.

Mr. LAMBERT: Are they always fully employed—these architects—or would it be possible to use architects on a consultant basis?



Mr. E. B. ARMSTRONG (*Assistant Deputy Minister, Finance Division, Department of National Defence*): In the answer to your question which was tabled yesterday—I do not think I have it here—the amount of money that has been spent for architects in the department, and for civil engineers, and for design engineers—and the amount that has been spent for consultants is shown; and if my recollection is correct, it is about twice as much—perhaps two and one half times as much being spent for consultants.

But architects in the department are necessary to provide initial design, and to interpret the departmental requirements. They are all fully employed, and in the event, of course, of the construction program permitting it, they would do a complete design. But at the moment this, of course, is not possible, and we employ a substantial number of professional architects and engineers for design purposes.

Mr. LAMBERT: Is it the policy of the department that its own architects will do the design and supervision of the work as much as possible to the exclusion of consultants?

Mr. ARMSTRONG: No, it is not the policy of the department to do that. It is necessary for the department to have a basic staff of design people—first of all, because of the specialized nature of many of its requirements, and the necessity to interpret what the army, air force or navy need. But, civilian architects and engineers are hired. However, we never have attempted to have a design staff that is capable of doing all the design work in the department. In fact, most of it is done outside.

The CHAIRMAN: Have you a question, Mr. Macdonald?

Mr. MACDONALD (*Kings*): Yes, Mr. Chairman, I have two short questions in connection with page 305.

The CHAIRMAN: Is it about architects?

Mr. MACDONALD (*Kings*): No.

The CHAIRMAN: Did you have a question on architects?

Mr. WINCH: Yes, on architects.

I understood the minister to say, a few moments ago, that architects were being used, to a great extent, on survival operations. Did you say that, Mr. Minister?

Mr. PEARKES: There is a lot of work in connection with survival operations which still requires some design work being done by architects.

Mr. WINCH: Could I ask what type of design work on survival operations requires architects?

Mr. PEARKES: Very largely, the establishment of communication centres and federal-provincial regional centres, where there will be a degree of protection for the signal personnel and other people utilizing those places.

The CHAIRMAN: Now, Mr. Macdonald.

Mr. MACDONALD (*Kings*): I notice, Mr. Chairman, that the position of director of studies at R.M.C. is a new one. Has there not been a director of studies there before?

Mr. PEARKES: Yes, there has been an officer who has had the title of director of studies, but he was never so classified in the civilian classification. It is not an addition of a new position, but a reclassification from the position which was previously called "scientific adviser".

Mr. MACDONALD (*Kings*): One further question, Mr. Chairman. Has the position of scientific consultant, at the top of the page, been abolished?

Mr. PEARKES: Yes.

When I said "scientific adviser" I should have said "scientific consultant". "Scientific consultant" is now named official director of studies. He was called, colloquially, a director of studies.

Mr. PARIZEAU: I have a question in connection with technical officers. Would you please advise exactly what are their duties?

Mr. PEARKES: Technical officers?

Mr. PARIZEAU: Yes.

Mr. PEARKES: Would you answer that question.

Mr. ARMSTRONG: These officers are civilian professional staff. A considerable proportion of them are engaged in army establishments for design of equipment, and so on. They are all in the army, or servicing the army. Also, some are employed in the army work services, and some in the R.C.E.M.E. base workshops.

The CHAIRMAN: Are there any further questions on page 305?

Mr. LAMBERT: Mr. Chairman, do the same considerations apply to the engineers listed there—maybe a little over 100 of them—as applied to the architects—that these men are there to advise and to work with engineering consultants, or do they do the design work themselves?

Mr. ARMSTRONG: The same consideration applies to the proportion of the engineers who are part of the design staff. Of course, all these are not connected with buildings and works; some are in the establishments I mentioned—particularly, the army development establishment.

Mr. SMITH (*Calgary South*): I have a question, Mr. Chairman.

In returning to the defence colleges, a cadet must, before acceptance, write an entrance examination. Is this not correct, sir?

Mr. PEARKES: I do not think there is any written examination. He has to have a senior matriculation, and that is accepted. I am sorry; I am just informed that there are certain intelligence tests held and, certainly, an oral examination or interview.

Mr. SMITH (*Calgary South*): The reason for my question is that the minister will, perhaps, recall that I have expressed concern in that cadets coming from a particular province where the standard—if we may, the educational system—may be somewhat lower than another province, have expressed difficulty in obtaining entrance into the colleges. Now, one cannot expect the colleges, of course, to pre-train the cadet in order to be admitted; but is this a problem that has been brought to your attention in any other instance?

Mr. PEARKES: Some years ago there was a definite allotment made to the various provinces, and some of these provinces were not able to fill their allotment. However, I believe this general standard has been levelled off now and that there is a more even distribution amongst the provinces than was the case before World War II.

Mr. SMITH (*Calgary South*): Then, you are satisfied that the provinces, in balance, are making their contribution—per capita, of course—to the colleges.

Mr. PEARKES: Yes. I have not the list by province here, but I can get that, if necessary.

Mr. SMITH (*Calgary South*): It is not necessary, Mr. Minister.

Mr. PEARKES: I would like to make one correction. I am told that there will be four different types of engineering degrees. There is mechanical engineering, chemical engineering, civil engineering, and one other.

Mr. WINCH: Could I follow this up?

Mr. HELLYER: I have a supplementary question.

Mr. WINCH: This is a supplementary question. To me, this is a rather important principle.

Do I gather, from what the minister has said, that entrance into the college has been or is now being based on an allocation to provinces and not on the ability of a person, irrespective of the province from which he comes?

Mr. PEARKES: I said that is what had happened.

Mr. WINCH: But not now?

Mr. PEARKES: It has been changed.

Mr. WINCH: It is based on ability now?

Mr. PEARKES: Yes.

The CHAIRMAN: Mr. Hellyer, have you a question?

Mr. HELLYER: Yes, Mr. Chairman, I have one question.

Is grade 12 not sufficient for College Militaire and Royal Roads?

Mr. PEARKES: Junior matriculation, or the equivalent of junior matriculation, is required for College Militaire, and that is why those lads going to College Militaire are given one year extra. That is really a pre-college year.

The CHAIRMAN: Are there any further questions on page 305, or may the page carry?

Mr. CARTER: Does the military college accept other students besides those who come from the feeder colleges, like Royal Roads?

Mr. PEARKES: I did not hear all your question.

Mr. CARTER: Do they accept other students? Do they have to go through Royal Roads to get to R.M.C.?

Mr. PEARKES: No. There is a certain accommodation problem. They can go either to Royal Roads, College Militaire or R.M.C. for the first two years.

R.M.C. does not accept any other students for the third and fourth years, unless they have been either to R.M.C., Royal Roads or College Militaire.

Mr. CARTER: That is the point I wanted to clear up. They do not accept third and fourth year students from other universities.

Mr. PEARKES: They do not accept any from any other university.

The CHAIRMAN: Shall page 305 carry?

Some hon. MEMBERS: Carried.

The CHAIRMAN: Page 306 is next. Are there any questions on that?

Take a moment, and look it over.

Mr. CHAMBERS: Mr. Chairman, there are a number of librarians, and I was wondering if these are connected with the university, or with the departmental library?

Mr. PEARKES: There is a departmental library which employs a librarian, and there are librarians at R.M.C.

The CHAIRMAN: If there are no further questions on page 306, may the page carry?

Some hon. MEMBERS: Carried.

The CHAIRMAN: Page 307 is next. Are there any questions on this page?

Take your time, gentlemen. If not, may the page carry?

Some hon. MEMBERS: Carried.

The CHAIRMAN: Page 308 is next.

Have you a question, Mr. Roberge?

Mr. ROBERGE: I notice there is one driver, U.S.S.R. I noticed yesterday there was one in the navy and one in the air force.



Mr. PEARKES: They have an army, as well as a naval, and air force attache in the U.S.S.R.

The CHAIRMAN: Are there any further questions, Mr. Chambers?

Mr. CHAMBERS: Is he a Canadian, or a local man?

The CHAIRMAN: Do you mean Russian or Canadian?

Mr. PEARKES: He speaks Russian. He is a Russian.

Mr. HELLYER: Have we made any attempt to obtain a member of our army for driver to one of the military attaches in Ottawa?

Mr. CHAMBERS: I notice he is very well paid. He gets a good deal of money.

Mr. PEARKES: I do not think any attempt has been made to do that.

Mr. SMITH (*Calgary South*): I can suggest a selection for the job.

The CHAIRMAN: Are there any further questions on page 308?

Some hon. MEMBERS: Carried.

The CHAIRMAN: Page 309 is next. We are still on civil staff, are there any questions, gentlemen?

Some hon. MEMBERS: Carried.

The CHAIRMAN: Page 310—still civil staff—mechanics, operators, painters.

Some hon. MEMBERS: Carried.

The CHAIRMAN: Page 311—still civil staff—plasterers, railroad conductors, repairmen and riggers.

Mr. Hellyer, there are some riggers on there.

Mr. HELLYER: What page are you on now, Mr. Chairman?

The CHAIRMAN: Page 311.

Mr. WINCH: At the bottom of page 311 we start getting out of the civil staff.

The CHAIRMAN: We are down to the last six lines of page 311.

Mr. PARIZEAU: Mr. Chairman, I notice there is a railroad conductor and a railroad engineer; have we a railroad in the army now?

Mr. PEARKES: Yes, at the ammunition depot there is a small railway.

Mr. HELLYER: If I might revert to the previous page, I notice there are categories there of housekeeper and housemaid. I notice the housekeepers are required no longer, but there are more housemaids.

Mr. PEARKES: The housemaid looks after the nursing quarters at the tri-service hospital at Kingston.

Mr. HELLYER: That is where all these housemaids are employed?

Mr. PEARKES: I think there are only two there.

Mr. HELLYER: There are eleven.

The CHAIRMAN: Eleven this year.

Mr. SMITH (*Calgary South*): What is the matron's responsibility?

The CHAIRMAN: Wait until we check it up.

Mr. PEARKES: All are employed in the quarters of nursing sisters.

Mr. Chairman, may I say one word in regard to the total, as I think it might be of interest. There is a net decrease of \$1,828,000 this year, and that is attributable to a reduction of 881 man-years. You will see that there has been a very distinct effort made by the army in the past year to reduce the number of civilian personnel. That has been done by the army in some cases assuming the tasks which were done by civilians in the past.

Mr. SMITH (*Calgary South*): Would this not be reflected in the work of your establishment board as well?

Mr. PEARKES: That reflects the work of the establishment board. You will find it rather difficult to link the actual decrease in dollars to the reduction of man years. There has been an increase in the pay which has been received by civilian personnel in the United Kingdom and in Germany.

Mr. HELLYER: Did the minister not say something earlier to the effect that it was cheaper to have work done by civilians rather than by service personnel.

Mr. PEARKES: There has been no increase in the number of servicemen.

Mr. HELLYER: You are saying that some of the duties previously done by civilians are now being done by servicemen, in addition to their regular duties.

Mr. PEARKES: Yes.

Mr. HELLYER: How many of these civilian personnel will receive increases in salary this year?

Mr. PEARKES: I think they all will; but as stated here previously that is not reflected in these estimates because a supplementary estimate under the Department of Finance takes care of those increases this year.

Mr. HELLYER: Does the minister have any indication as to when some announcement might be made in respect of the increases under consideration.

Mr. PEARKES: No.

The CHAIRMAN: Are there any questions on the last items on page 311.

Mr. WINCH: I would like to have some comment from the minister on the last time—pay and allowances—as it refers to army personnel in Canada. I would like to know the number or army personnel in Canada and I would like to have a comment from the minister on their duties. I understand from what has been said by the minister heretofore that so far as military operations by the army in Canada are concerned, there is no function in a military operation except to be able to counteract a small—I think I am using the right word—commando raid somewhere in Canada. Outside of that one military operation, I have gathered that the army in Canada only has one other function and that is in a survival operation. Now, in view of the coordination and getting civilians in on this, I would like to ask is it necessary, and if so, why, that on a military basis—when I think all you require is an experienced and trained force to take care of small commando landings—to have what I surmise is the vast majority of the armed personnel in the Canadian army in Canada being for use in the need of survival operations?

Mr. PEARKES: I think you have omitted to mention the role of providing the troops for rotation going over to the brigade in Europe.

Mr. WINCH: There is one brigade in Europe and how many in Canada?

Mr. PEARKES: Three.

Mr. WINCH: Do we require three brigades in Canada to be able to take care of commando raids and operate the rotation of one brigade in Europe?

Mr. PEARKES: In addition to the one brigade in Europe there are the forces in UNEF where there are another one thousand men employed. I believe that for survival operations there are none too many regular forces in Canada. We have one brigade stationed in Quebec and the Atlantic provinces, one brigade in central Canada and one brigade stationed between Winnipeg and the Pacific coast. If this country ever is subjected to nuclear bombardment I am certain that there would not be enough regular soldiers to begin to cope with the problems with which we would be faced. As I mentioned previously, when we were dealing with survival we are maintaining a continuous warning system and fall-out warning system all across the country. Then, of course, there is the training of the personnel who come in and join the army. There is a substantial turnover every year. There have to be new recruits coming in who have to be

trained continually. Then there are the administrative duties. I am of the opinion that, with the problems with which Canada is faced, we have an army which is not in excess of requirements.

Mr. WINCH: Under present regulations what is the established strength of a brigade?

Mr. PEARKES: The established strength of the brigade in Europe is 5,500 and in Canada it is about the same.

Mr. WINCH: 5,700.

Mr. PEARKES: 5,500.

Mr. SMITH (*Calgary South*): I have a supplementary question. Is it not also an established fact that in the event that additional forces are required—in the event of an emergency—for the primary role of either civil defence or to serve abroad you have certain minimum standards of strength. I am thinking of the last two years when this was a principle that you used. You made changes in some instances in enlarging a much larger force. Is this not a principle you have to take into consideration?

Mr. PEARKES: The present concept of the next war does not visualize sending large forces of men out of this country. The two brigades are held as a strategic reserve for NATO. They are held in this country as a part of this strategic reserve for NATO, making up what is our commitment of one brigade group in Europe and two brigade groups here in Canada.

Mr. SMITH (*Calgary South*): Otherwise you consider then, sir, that your forces really are at maximum strength now, even in the event of an emergency other than perhaps for filling the gap for national survival.

Mr. PEARKES: Yes. I believe that if a war comes that war would be fought with the forces which are in being at the time. I see little likelihood of forces being built up by process of mobilization and a calling in of a large number of reserves.

Mr. CHAMBERS: You have been using the term "brigade". Is it not more true in the case of the formation, particularly in Europe, and the others in reserve in Canada that they in fact are brigade groups with considerably more fire power and diversity and mobility than what generally was known as an infantry brigade in the last war. Brigade group is a better description.

Mr. PEARKES: Of course there is a great deal more fire power in the brigade of today and a great deal more mobility, with the result that they are able—may I use the term of previous wars—to hold a front very much wider than was ever conceived in World War II.

Mr. CHAMBERS: For instance the brigade in Europe has tanks and artillery attached to it.

Mr. PEARKES: The brigade in Europe has tanks and artillery attached to it as an integral part of the brigade group.

Mr. WINCH: Is the brigade group in Europe there mainly because of the brigade's fire power or is there also the psychological effect of being a partner in the NATO group in Europe?

Mr. PEARKES: There is no doubt about the psychological effect on our European partners by the presence of a Canadian brigade in Europe. It has a very definite stimulating and heartening effect; but it is not purely that. It is an effective part of the shield forces of NATO and would be employed in a definite role if there was a land attack in Europe.

Mr. WINCH: Wholly and solely as a shield force.

Mr. PEARKES: As part of the shield forces of NATO. That is, to stop the advance of any hostile movement by a potential enemy.



Mr. WINCH: Then may I ask this, as it comes under pay and allowances. In the event that the force in Europe has to be used as a shield force, can you visualize any aggressor moving in with strictly conventional weapons, and if they move in with other than conventional weapons what is the equipment of our 5,500 men to be used as a shield force against an aggressor who may use other than conventional weapons.

Mr. PEARKES: In answer to the first part of the question, it is conceivable that an aggressor—the Russians—might decide not to use nuclear arms. I do not think you can rule that out altogether. As to the second part of the question, our brigade is covered by troops of other nationalities which have the capability of using nuclear weapons. As you know we are obtaining the Honest John launcher and also a rocket which is accompanying that launcher; that rocket has a capability or will have when we get it, of having a nuclear warhead attached.

Mr. WINCH: That leads me to this question. If you are obtaining them, it is then with the knowledge that they may be used by Canadian forces with a nuclear warhead.

Mr. PEARKES: As the Prime Minister has said many times, negotiations are underway so that nuclear warheads will be available—if and when required—and they will be used with the permission of the Canadian government of the time.

Mr. WINCH: You know, Mr. Chairman, all I can say now is that I can understand something which you and I heard, and that is that this committee is truly experienced in frustration.

The CHAIRMAN: Mr. Minister, I wonder if I might have something pinned down on this amount of \$173,700,000. I wonder if we might have this information available for another meeting. Could we take one unit at national defence headquarters in Ottawa which looks after approximately 100,000 men now—that is a tri-service unit—as to their establishment as compared to one which looked after one million people during the war, could that be possible? Or is there such a thing?

Mr. PEARKES: I do not think there is such a thing.

The CHAIRMAN: Well, I think there is one; the central medical equipment depot, which was tri-service during the war, and is now tri-service; and if we could get a comparison of the establishment and the number of people, and of how filled it was during wartime, we would like it.

Mr. PEARKES: Yes, I think we can get that information for you.

The CHAIRMAN: Are there any further questions on page 311?

Mr. PEARKES: But we would not be able to get you just that information, because the medical equipment depots were all disbanded or dispersed at the end of the war.

The CHAIRMAN: I know; there was a different type of name for them, but they are still doing the same functions.

Mr. PEARKES: We will get you the information.

Mr. SMITH (*Calgary South*): Are we still on pay and allowances?

The CHAIRMAN: Yes.

Mr. HELLYER: I would like to continue this discussion and ask if the minister could tell us if our native brigade is trained and organized in such a way as it would be competent to fight in a nuclear war?

Mr. PEARKES: Yes.

Mr. HELLYER: This involves new methods of organization and dispersal from those which were in effect prior to this reorganization.

Mr. PEARKES: Yes, definitely. All troops of the Canadian army are trained so that they can operate on a nuclear battlefield, as well as being trained for the other tasks which might confront them; that is, the prevention of the outspread of a local war, where it is not anticipated that nuclear weapons would be used; and they are trained to be able to fight not only on a conventional battlefield, but also on a nuclear battlefield.

Mr. HELLYER: In the event that the Russians were to attack this continent and to use only conventional forces, could the minister give us any indication of what the manpower ratio would be—whether it would be three to one, or four to one?

Mr. PEARKES: I would not feel competent to give you that information.

Mr. HELLYER: Are the troops today—

Mr. PEARKES: There is no doubt about it that the Russian manpower is considerably greater than the manpower of the western armies assembled in Europe.

The CHAIRMAN: Would you please stick to pay and allowances?

Mr. HELLYER: This is all included under them, because we are paying these troops over there.

The CHAIRMAN: But we are not paying the Russians.

Mr. HELLYER: In that case, undoubtedly this is the reason why the NATO shield forces have felt that it is necessary to have atomic capability, because if the Russians should throw the full weight of their land army against the NATO shield, it would be necessary to employ nuclear weapons in order to stop them, even for a short period of time?

Mr. PEARKES: That is correct; and the possibility of having to use nuclear weapons has been part of the accepted NATO policy, and it is part of that policy.

Mr. HELLYER: This is the reason in the previous statement that you said that, in addition to the atomic weapons for the NATO troops, Canada would not wish to see them equipped less effectively than the troops with which they were associated.

Mr. PEARKES: That is a reasonable statement for me to have made.

Mr. HELLYER: Do you wish to carry on with equipment now?

The CHAIRMAN: We have certainly gone down to the end of that alley. Are there any further questions on pay and allowances?

Mr. CHAMBERS: On pay and allowances I would like to ask if any consideration is being given to increasing the pay of the service personnel?

Mr. PEARKES: In the past it has been customary to relate the pay of the armed services and of the royal Canadian mounted police to the scale of pay of the civil service of Canada; and if the pay of the civil service of Canada is increased, then it is very probable that the pay of the armed services would be increased; and with that in view, consideration is being given to increases in the scale of the pay and allowances; but no finality has been reached in that respect.

Mr. WINCH: I am still not satisfied with the answers I have received as to why it may not be possible to reduce the Canadian armed forces from four brigades, I think, down to three. As I understood the answer of the minister, the only military operational utilization of the Canadian army today is one, to have a brigade in Europe, and two, to have forces for rotation, in Canada, which is once every three years, I understand, and to have a third force to act in connection with any small or commando raid.

It still occurs to me that their major role in Canada is that of survival operations. Now, is it not possible to have a highly trained and mobile force for

that survival operation, and still have a rotation basis every three years, with two brigades in Canada? Is it not possible at all, or, may I put it in a different way: is it not, in the estimation of your service, a matter of interest that 17 million people of Canada, whose survival is of interest, have not sufficient interest in the problem to make sufficient sacrifice to undertake the required training in order to be able to assume a great deal of survival operation work?

I admit I am in search of information, but if Canadian citizens are responsible, and if my analyses of the meaning of the use of four brigades is correct, I fail to see why we cannot cut those four brigades down to three.

The CHAIRMAN: Would you like the minister to answer?

Mr. WINCH: Yes, I am sorry that it had to be a statement.

The CHAIRMAN: That is all right.

Mr. PEARKES: Well, my own firm conviction is that to cut down the Canadian army, as you suggest, would not provide the degree of security that this country should expect in the event of nuclear attack.

I do not believe that the civilian personnel across the country are trained or equipped to the extent to leave it to them to carry out such tasks as the warning, the reporting system, both the initial warning, and that of attack, and of the fall-out system; nor are they trained and equipped to carry out the dangerous role of re-entry into devastated areas.

If this country is ever subject to nuclear attack, we shall need a great deal of help from the civilian population, as well as the tasks which are being assigned to the regular army, and I think it would be less than prudent to attempt to cut down the army in its survival role at the present time.

Mr. WINCH: May I ask one further question: there has just been now a change in the policy of two years service in Europe to three years. Would that not automatically mean then that with that changeover it would be possible to have a reduction in personnel?

Mr. SMITH (*Calgary South*): And with the advantage of reducing the primary costs, too.

Mr. PEARKES: Originally the troops were on a two year rotation, and I extended that just over two years ago to a three year rotation, rotating one-third of the brigade each year. That was not purely a measure of economy, because it saved transportation costs; but it also increased considerably the efficiency of the troops in Europe, because it would mean that one-third of them in each year would be new arrivals in Europe, whereas two-thirds of them at least knew the conditions there, and I am certain that it has increased the efficiency of our brigade in Europe.

Mr. HELLYER: Are part of these forces in Canada still assigned to be used as a mobile striking force?

Mr. PEARKES: In each of the three brigade groups we have personnel trained for airborne duties, in order to deal with any commando type of operation which might be carried out; and that in the main was the role of the so-called mobile brigade.

Actually that mobile brigade was never actually assembled as a brigade; they were dispersed between the three brigades, and that policy has been continued.

Mr. HELLYER: How many of these troops would have received training at Fort Churchill, for arctic indoctrination?

Mr. PEARKES: I would say about one-third of our troops, roughly; but I cannot give you the exact figures because I do not have them here. There has not been quite the same emphasis placed on parachute training as there previously was, owing to the great difficulty in carrying out parachute operations



in force in the arctic, and also owing to the fact that the arctic is gradually being opened up with respect to aircraft, and where there are more air fields than there were.

Mr. ROBERGE: I note that there is only one line devoted to the expenditure of \$173 million, while there are seven pages devoted to the expenditure of \$56 million. Under staff, we have a number of personnel, and in this last line we have a number of military personnel. Would it be possible to have a more detailed breakdown of the pay and allowances item; and if not, what is the reason for it?

Mr. PEARKES: Yes, I can give you a breakdown or more of a breakdown in connection with that \$173 million. There is a reduction this year of \$925,000 from last year. As to the basic pay, I will give it to you in round numbers.

The basic pay amounts to \$111.7 million; trades pay \$15.6 million; subsistence and ration allowance, \$25.6 million; marriage allowances, \$10.5 million; separated family allowances, \$2.2 million; clothing allowances, \$1.5 million; foreign service allowances, \$2.8 million; and aircrew training for the army, the small sum of \$829,000; and then the regular officers training plan, the officer cadet program, \$2 million practically.

Mr. ROBERGE: That is for the money involved. Could we have the number of personnel involved?

Mr. PEARKES: The total number of personnel which that amount of money is to pay is 47,799. That is the total number of army personnel. That is a ceiling which has been imposed on the army.

Mr. WINCH: On the straight army, itself?

Mr. PEARKES: Yes.

Mr. WINCH: All four brigades, which is 22,000?

Mr. PEARKES: I beg your pardon?

Mr. WINCH: Four brigades is 22,000, is it not?

Mr. PEARKES: I could not tell you offhand. A brigade is roughly 5,500.

Mr. WINCH: That is 22,000.

Mr. PEARKES: And multiply that by four, and you get 22,000.

Mr. WINCH: How many did you say this pay and allowances covers?

Mr. PEARKES: 47,799.

Mr. WINCH: Well, where is the difference between the 22,000 and 47,000?

Mr. PEARKES: Those are personnel in training, and not allocated to the brigades, at the various schools of instruction, on the various administrative duties, on duties such as communications, and the force which is overseas not with the brigade—that is, the UNEF force.

Mr. WINCH: If you add on UNEF, you get 23,000. Is ordnance separate from a brigade?

Mr. PEARKES: The ordnance depots look after all the equipment for all the army.

Mr. WINCH: In other words then, in order to maintain 22 active men in four brigades it takes 27,000 outside? That, basically, is what it means, does it not?

Mr. HELLYER: You said 22 active men.

Mr. WINCH: 22,000.

Mr. PEARKES: 22,000, approximately, in the field units; the rest are in schools, in administrative units, in all that are embraced by the term "logistic services", and there are a few other operational units.

Mr. WINCH: And that does not include all civilians! That is an amazing figure.

Mr. CHAMBERS: Was it not felt that during the last war there were 10 men needed behind each actual rifle in the front line to supply the administration, logistics, and so on?

Mr. PEARKES: It was something of that nature.

Mr. CHAMBERS: Then, I think the army is to be congratulated on its great improvement.

Mr. LAMBERT: In addition, how many men are there on the Alaska highway system?

Mr. PEARKES: I think it is about 1,000.

Mr. LAMBERT: In addition, the service corps in the army runs the logistics for the air force?

Mr. PEARKES: Yes, they run some supplies for the air force, the same way as the dental corps runs all the dentistry for the three services.

Mr. LAMBERT: And that all comes in as well?

Mr. PEARKES: It all comes in.

Mr. LAMBERT: Into the army?

Mr. PEARKES: It is embraced in the general term "logistic services".

Mr. ROBERGE: Coming back to my question, I was wondering why the information that was given a moment ago is not included in the book of estimates.

Is there a security, or some other reason?

Mr. PEARKES: No, it never has been included in the estimates. These are general headings which had been accepted for a number of years, and they embrace the sub-heading to which I have referred.

Mr. ROBERGE: There is no special reason why it is not there?

Mr. PEARKES: No.

Mr. SMITH (*Calgary South*): Mr. Minister, you left the impression—or, at least, you did with me, in any event—that the establishment now of the Canadian army just meets the bare requirements for a national survival emergency. I would ask you, sir, if, recognizing the possible future contributions to the United Nations, whether you consider, or are considering, actually increasing the size of the force, or is there some possibility this argument might be countered by a possible retraction of the numbers required for the brigade in Europe, with the build-up of West German forces?

Mr. PEARKES: If the brigade in Germany was withdrawn, it would give an opportunity for a reduction in the number of forces retained. Is that what you mean?

Mr. SMITH (*Calgary South*): I will repeat, Mr. Minister. You did leave the impression that, in the interests of national security, the size of the force is a bare minimum. Is this a correct impression?

Mr. PEARKES: That is very definitely and very firmly my opinion, because these personnel who are employed in the training schools and in the depots across the country—training recruits and all, are organized into mobile columns for survival operations, and every man in the Canadian army, in the event of survival operations, would have a special job to go to. He is trained, or is being trained, in these survival operations.

Mr. SMITH (*Calgary South*): If it is true that this represents a bare minimum—and we assume this information is based on advice from the professionals, such as the chiefs of staff—would it not seem more reasonable to have a safety margin over and above the present strength?

Mr. PEARKES: As I said, I feel this is a minimum requirement for regular forces, and that we must augment these regular forces through such organizations as the militia of Canada and the trained civil defence worker.

Mr. SMITH (*Calgary South*): It is the word "bare" minimum that concerns me.

The CHAIRMAN: Mr. Morton.

Mr. MORTON: Has the committee had any decrease yet on the reinforcement policy of the Canadian army?

The CHAIRMAN: Item 1 is being kept open; we will take your question then.

Mr. MORTON: All I wanted to ask, Mr. Chairman was how long it took to train a reinforcement, and what was the policy of training a sufficient number of reinforcements, once the Canadian army was committed into action?

Mr. PEARKES: Well, the concept of the war which we expect to be fought is that it will have to be fought with the troops which are in being on the day that war breaks out, and that there will be little opportunity of reinforcing troops with what you refer to as reinforcements that we call up and train at that time.

We picture a short war, which gives little opportunity for the training of reinforcements.

Mr. HELLYER: Although this is a sort of fundamental policy, is it not true that some people quarrel with it? For instance, General Maxwell Taylor's book, although it contains a great many contradictions, does make one fundamental point—and that is the possibility of a fairly sizeable ground action some place in the world, which would be met by the allies with conventional weapon attack, as a matter of policy, in which case all available reserves would have to be put in the line.

The CHAIRMAN: And your question: what reserves will be put in the line?

Mr. HELLYER: In this case, the matter of time for not only getting reinforcements to the battlefront, but also in training reserves, might be relative.

Mr. PEARKES: As I stated at an earlier meeting, we retain one battalion at readiness to go anywhere in the world in order to stop the outspread of some local war, if the United Nations sees fit to intervene in that way and call upon Canada for that help. In addition to that, the special forces which are in Canada—and I have mentioned two brigades are earmarked for strategic reserve for NATO; and that leaves you one other brigade—which could be dispatched, if the Canadian government of the day decided so to do.

Mr. HELLYER: Mr. Minister, what is the minimum length of time you consider would be necessary for training a unit in Canada before you would send it over to join the NATO brigade?

Mr. PEARKES: The regular units in Canada would join the NATO brigade at any time.

Mr. HELLYER: That is not my question. My question is this: for newly recruited persons, what is the minimum length of time required to train them?

Mr. PEARKES: A newly recruited unit?

Mr. HELLYER: Yes.

Mr. PEARKES: Many months.

The CHAIRMAN: Mr. Parizeau?

Mr. PARIZEAU: Mr. Chairman, I have a short question.

What is the basic pay of a first-class soldier, whether he is married or single?

The CHAIRMAN: A private.

Mr. PEARKES: The basic pay of a private is \$104.

Mr. PARIZEAU: That is single?



Mr. PEARKES: That is a single private who is over 17 years of age. That is the starting pay. That is the basic pay, and it increases as he goes up the scale, and as he learns additional trades.

Mr. PARIZEAU: And, as a first-class soldier?

Mr. PEARKES: It is all given in last year's white paper—and there is no change.

The CHAIRMAN: Gentlemen, may pay and allowances carry?

Mr. CARTER: Just one question, Mr. Chairman.

Do these civilian allowances include unemployment insurance and things like that, under civilian allowances?

Mr. PEARKES: To what are you referring?

The CHAIRMAN: The one before pay and allowances—civilian allowances; and Mr. Carter wants to know if that includes unemployment allowances and other fringe benefits.

Mr. ARMSTRONG: Those are the cost of living allowances for isolated posts.

Mr. CARTER: What item includes the unemployment premiums and so forth, for the civilian personnel?

Mr. ARMSTRONG: The unemployment insurance item is the second last one in this vote—pension, superannuation and other benefits.

Mr. CARTER: That is in a separate item?

Mr. ARMSTRONG: Yes.

Mr. CARTER: I have one further question. Is there a separate breakdown for trades pay—the amount of money the army pays out for trades pay?

Mr. PEARKES: Yes, I read it out—\$15,632,730.

The CHAIRMAN: Gentlemen, may pay and allowances carry?

Some hon. MEMBERS: Carried.

The CHAIRMAN: Page 312—still, operation and maintenance, down to militia, including Canadian officers training corps.

Are there any questions on the first half of the page, gentlemen?

Some hon. MEMBERS: Carried.

The CHAIRMAN: The second half of the page—civil staff. May it carry?

Mr. HELLYER: Before that carries, I understand that some of the militia units had their civilian staffs cut but, in some cases, they feel it has detracted severely from their effectiveness. Would you give us the reasoning behind this; also, your latest appreciation of the role and effectiveness of the militia in survival operations.

Mr. HELLYER: And also his latest appreciation of the role and effectiveness of the militia in survival operations.

Mr. SMITH (*Calgary South*): While he is doing that—with the permission of Mr. Hellyer—would he also include in his reply the policy with respect to call-outs. The number of these has been decreased, and some regret has been expressed by senior commanders to the effect that this also has reduced efficiency in the militia.

Mr. PEARKES: At the time of Korea it was necessary to call all the regular force personnel who then were attached to militia units to the regular units so that they could proceed to Korea in turn, in other words replace those. A number of militia men were called out to do various tasks around the headquarters of the militia units. They were instructors and clerical personnel. Some of them also were used as stewards in messes and that sort of thing. It was found that we could, without seriously affecting the efficiency of the militia, reduce that number of call-outs. They were reduced by 50 per cent earlier this year, partly as an economy measure. While there have been complaints sent in

and there has been some disappointment expressed, on the whole I think the militia have been able to overcome their problem and are carrying on efficiently.

Regarding the general question, of course, there was some uncertainty as to the role of the militia in the early days when they were asked to undertake seriously these survival operations; but from the experience I have had, and from the reports I have had, I must say that I feel the militia is tackling the job with determination and in many instances with enthusiasm. It has given them new life. They see a definite job they have to do. New equipment is being supplied to them. It is only in training quantities at the present time and it will take some time before we are able to acquire all the equipment they need. As new equipment becomes available I feel quite certain that the importance of their role in survival operations will be even more appreciated than it is today.

The CHAIRMAN: Shall militia carry?

Mr. SMITH (*Calgary South*): I have a supplementary question. Mr. Minister, in respect of the call-outs you referred to, I can appreciate the fact that the units may not need barmen or certain ancillary trades, but I believe there are a number deployed as part of the instructing staff. Have any large numbers of these been released?

Mr. PEARKES: As I said, the total number of call-outs has been reduced by approximately 50 per cent. Who is let out would be at the discretion of the general officers commanding.

Mr. SMITH (*Calgary South*): But you have said that you do not consider this in any way has impaired efficiency of the militia.

Mr. PEARKES: No, because their service normally, or in some cases, has been replaced by people who are doing the work of assisting the militia units.

Mr. SMITH (*Calgary South*): If the figure is readily available, may I ask what is the percentage of servicemen per militia unit? Is there any rule in respect of that?

Mr. PEARKES: I do not think there is any rule of thumb figure. It is left at the discretion of the general officers commanding to render such assistance as they can. A great deal of assistance is given by the regular training staff. There is a training cadre in each command and also non-commissioned officers are sent down from nearby units to assist in the evening training.

Mr. SMITH (*Calgary South*): May I deal with another matter. There has been an adjustment in the summer camps in respect of the militia. In the last year I believe there has been a change in the policy in this respect. The difficulty, as I understand it, is that many men are unable to tend camps under the new policy. Is this criticism, in your view, of a serious nature?

Mr. PEARKES: There always has been difficulty so long as I can remember in connection with the summer camps in meeting the convenience of all the men in any militia unit; but I do not think the change has made any appreciable difference. Militia men now being attached to a definite regular unit are relieved of the responsibility of a lot of administrative duties and the reports I have received are that the training is more efficient than used to be years ago.

Mr. SMITH (*Calgary South*): Otherwise, by nature of the fact that they are in camp and serving with permanent units, in your view this improves efficiency.

Mr. PEARKES: Yes.

Mr. SMITH (*Calgary South*): Is it correct that the militia is at its highest strength since some time? Do you have the figure?

Mr. PEARKES: I do not have up to date figures, but the militia has remained at about the same strength for the last twenty years, and that is about 40,000 men. The last figure which has been given me is 40,010.

The CHAIRMAN: That is in the white paper, gentlemen.

Mr. PEARKES: That is as at May, 1960.

Mr. LAMBERT: In connection with summer camps it is my understanding that last year the summer camps were held in June. Was there any appreciable decline or change in the number of personnel who attended camp, and is the same policy now being continued. With more time for these men to adjust themselves, is it anticipated that the number of militia men attending camp this year will be greater than last year?

Mr. PEARKES: We expect it to be about the same. The same amount of money is allocated for training purposes. There is a certain amount of flexibility given the general officers commanding in that respect. We have to carefully work the militia training in with the schedule of training for the regular army.

Mr. LAMBERT: It is my understanding in so far as certain areas are concerned that among militia men are many school teachers and that they as a group are rather keen militia men. June, of course, is the wrong month for those men. I wonder if last year there had been an appreciable decline in the number of militia men attending camp, particularly among the officers, because the school teachers would have the qualifications to become officers.

Mr. PEARKES: I do not think that militia training is restricted solely to the month of June. I was on a visit to Swift Current this last weekend. While I was there I saw the local militia unit. This was on the first of July and they were leaving the next day to attend camp at Wainwright for two weeks.

Mr. MACDONALD (*Kings*): My question is in respect of the strength of the militia. I note that there is a reduction in the pay and allowances and there has not been much reduction in the militia. The minister mentioned earlier that if here is a war it probably will be a nuclear war but I often wonder what would happen in the event that nuclear weapons were banned on a world wide basis such as happened in the case of gas in World War II. Then I feel we would be quite largely dependant on the militia to provide the personnel required in the event of a war, just as in World War I and World War II when the citizen soldiers assumed a great proportion of the role in the war. I wonder if there has been any actual reduction in the militia or if there is any anticipated.

Mr. PEARKES: There has been a slight increase in the amount of money allocated for pay of the militia this year, an increase of \$288,758. There also has been an increase in the summer camp training bonuses. A bonus is given for efficiency. This is increased in the amount of \$4,125.

Mr. MORTON: Is this increase in the amount of pay and allowances to the militia reflected in each unit in the militia.

Mr. PEARKES: Each general officer commanding a command is allocated so much money for training purposes based on the number of units and he can apportion that, within some fairly strict regulations, as he sees best fit.

Mr. SMITH (*Calgary South*): Might I ask the minister if the department is giving any encouragement to a category of servicemen which is neither militia nor cadet. I am speaking of the young soldiers of high school age who are doing exceedingly well with little financial support, although the militia have taken them over. This is the young soldier cadet who does not qualify as a cadet.

Mr. PEARKES: There is the apprentice scheme in the regular army. I do not know whether or not that is what you are referring to, or whether it is the young militia man who is under seventeen years of age.

Mr. SMITH (*Calgary South*): Yes.

Mr. PEARKES: Special camps are arranged for selected personnel according to the funds which are available in the various commands. For instance, in



western command there is a camp conducted at Vernon where these young militia men go for a few weeks training. From what I have seen personally of the results, they achieve a very high standard of training. I believe that is carried out in all commands.

Mr. SMITH (*Calgary South*): I hope the department will continue to support it.

The CHAIRMAN: Are there any further questions on the militia?

Mr. CARTER: We have a greater strength and are paying less. Is there a decrease in the allowances or has there been a reduction in pay?

Mr. PEARKES: Of the militia?

Mr. CARTER: Yes.

Mr. PEARKES: We have approximately the same strength. It fluctuates all the time.

Mr. CARTER: We are spending only \$11 million, whereas last year we spent \$13 million.

Mr. PEARKES: That is reflected in the call-out personnel. Call-outs were paid full time.

The CHAIRMAN: That was cut by fifty per cent.

Mr. PEARKES: Yes.

The CHAIRMAN: Royal Canadian Army Cadets.

Are there any questions?

Mr. SMITH (*Calgary South*): Are you continuing the practice of bonusing the cadets for their attendance?

Mr. PEARKES: There is an allowance of \$3 paid per cadet and there are bonuses given for certain things such as signalling and trademen qualifications.

Mr. SMITH (*Calgary South*): This is an allowance really to induce him to become a cadet, is it not?

Mr. PEARKES: Well, it is an inducement for him to do more training, which is beneficial to him.

The CHAIRMAN: Now, gentlemen, your next vote is No. 223, "construction or acquisition of buildings, works, land and major equipment". Could we get through it?

Item 223. Construction or Acquisition of buildings, works, land and major equipment .....	\$ 70,410,000
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Are there any questions on this? There is a reduction from \$645,000 to \$325,000, in the purchase of real properties.

Mr. WINCH: I should not ask, but I wonder if the Vancouver armoury is under this?

Mr. PEARKES: Yes; a fire took place in Vancouver in the armouries of the Irish regiment.

Mr. WINCH: Do not tell me. I was a member of that regiment for seven years.

Mr. PEARKES: I know that; and I am afraid there was a good deal of destruction there. But facilities are provided for them at the present time out at Jericho, where they are carrying out their training now. Transportation is being provided from the city out to Jericho on their training nights.

We are looking for a new armoury site. There has been some difficulty in obtaining an armoury site. We reached an agreement with the city for a certain piece of land, but then some objection was raised by the residents in the area, so we are now looking to see if we can get another site.

Therefore there is no money in this year's allotment for the actual construction of that armoury.

The CHAIRMAN: Are there any further questions?

Mr. WINCH: I have been asked by a gentlemen nearby why I was in an Irish regiment, and the answer, of course, is because I am always "agin" the government.

Mr. PEARKES: I think I could give you a better answer than that.

The CHAIRMAN: The next part of the item is construction or acquisition of buildings, works, land and major equipment, construction of buildings and works. There is a reduction from \$49,950,000 down to \$34,540,000. Are there any questions?

Mr. HELLYER: I think we should have a breakdown.

The CHAIRMAN: Oh yes.

Mr. PEARKES: You mean a breakdown of the major construction areas?

The CHAIRMAN: It is construction or acquisition of buildings, works land and equipment, \$34,540,000.

Mr. PEARKES: Do you want it broken down by provinces?

The CHAIRMAN: I do not think that will be necessary. Just give us the major items.

Mr. HELLYER: Yes, give us the major items, and the area.

Mr. PEARKES: The major items of \$1 million or more include the following: the construction of the armouries in Toronto where, as you know, the university armouries has been used and where an agreement was reached with the city vacating that site; and that has meant the construction of three armouries. The sites of two have been selected, while one is in construction.

Mr. HELLYER: Before you go on, there has been a question raised in connection with the legality of the sale by the Department of National Defence of that land to the metropolitan corporation, because of the nature of the original deed to the department.

Mr. PEARKES: That has been brought to my attention, and I have asked the legal officers of the department to look into it.

Mr. HELLYER: When you have some information on it, would you be good enough to submit it to the committee?

Mr. PEARKES: Yes.

The CHAIRMAN: The next is major procurement of equipment: tanks, and armoured fighting vehicles, \$65,000.

Mr. WINCH: May I ask the minister under this item which amounts to some \$60 million odd—

The CHAIRMAN: That is your total.

Mr. WINCH: Just approximately.

The CHAIRMAN: Yes, all right.

Mr. WINCH: Is that money for equipment of a new type, or is it for the replacement of obsolete equipment?

Mr. PEARKES: This represents improvements in existing equipment, mainly. For instance,—and I mentioned this at a previous meeting,—we are improving the Centurion tanks. There is some \$380,000 included in that for armament around the fuel tanks of the Centurions, and there is equipment connected with the mortars and flash spottings, and certain other equipment, as I indicated, which is included. I can give you the items if you want them. We are also purchasing some additional rifles and machine guns, including the new FNC-1 rifle. All the forces are not equipped with that new rifle. There is an amount of \$2,300,000 involved.

Mr. WINCH: The point I am after is; during this coming fiscal year there will be no basic change in the equipment of the Canadian armed forces, is that right?

Mr. PEARKES: There will be some improvement in the fire control system of the artillery, and there will be additional small arms acquired. There will be very definite improvements made in the Centurion tank, and there will be some new equipment obtained in the nature of mortars.

Under the general heading of "equipment" we are replacing the old wireless 18 sets with the new C-42 sets.

Mr. HELLYER: Mr. Chairman, much has been said about the mobility of our forces. I was wondering if we could get a little further information in respect to the mobility that we presently have in the field. The minister has told us that the Bobcat, for instance, is not yet complete as far as development is concerned, and a decision has not yet been made in respect to the acquisition of it. What is presently being used? Are we still using the old universal carrier?

Mr. PEARKES: Yes, I think, it is the universal carrier which is being used.

The CHAIRMAN: Are there any monies in this vote for that development this year, Mr. Minister?

Mr. PEARKES: There is money in these estimates for the completion of the development of the Bobcat.

Mr. HELLYER: Does the minister know if the Bobcat can be loaded for transport in the CL-44 aircraft?

Mr. PEARKES: I do not think it can.

Mr. HELLYER: Would that also be true of the Caribou aircraft?

Mr. PEARKES: Yes. They cannot be put into the Caribou. I do think it can be loaded into the C-130.

I am told it can be put into the CL-44, but my impression is that it reduces the fuel load so much that it is hardly practical.

Mr. HELLYER: It would reduce the range and therefore would not be an effective cargo?

Mr. PEARKES: Yes.

Mr. HELLYER: Is the Bobcat to be amphibious?

Mr. PEARKES: Yes.

Mr. HELLYER: Do we have any amphibious equipment presently in the field?

Mr. PEARKES: I do not think we have anything other than bridge equipment and pontoon bridging.

Mr. HELLYER: Yes. It is alleged that the Russians have very large quantities of amphibious equipment, and that is one of the reasons, no doubt, why we are, or should be considering the replacement of some of our obsolete second world war equipment with something more up to date.

Now, in the matter—

Mr. PEARKES: That is the reason why we are pressing on with the development of the Bobcat.

The CHAIRMAN: Just a minute, Mr. Hellyer; I wonder if we could finish out this vote item by item. As you know, item 1 is still open, and I would like to clean this up. We have covered tanks and armoured fighting vehicles.

Mr. HELLYER: I have only three or four more questions on equipment.

The CHAIRMAN: Is there any money in here for that?

Mr. HELLYER: I do not know; that is what I am trying to find out.

The CHAIRMAN: Well, ask that question.



Mr. HELLYER: That is a little too convenient; I will ask the questions I have.

In respect to air support and mobility in the air for our troops in Europe, do we have any light aircraft at the present time?

The CHAIRMAN: That is air force.

Mr. HELLYER: It is army.

Mr. PEARKES: Yes, we have a limited number of light aircraft in Europe. They were sent over last year.

Mr. HELLYER: Would they just be for observation purposes, or would they have a troop carrying capacity?

Mr. PEARKES: They would not have a troop carrying capacity, except for carrying a limited number of personnel, like commanders and staff.

The CHAIRMAN: Is there any money in this vote for this?

Mr. PEARKES: No, there is no money.

Mr. HELLYER: Is there any money included for the acquisition of Caribou aircraft?

Mr. PEARKES: No.

Mr. HELLYER: I wonder if the minister could tell us why not. We understand the American army is purchasing these aircraft, and I would like to know why the Canadian army are not doing the same thing?

Mr. PEARKES: The requirements of the American army are different to our requirements, and we have no money in this estimate for the Caribou.

Mr. HELLYER: Have there been any developmental contracts with the De-Havilland Aircraft Company for the Canadian army?

Mr. PEARKES: Some years ago.

Mr. HELLYER: But not of recent date.

Mr. PEARKES: Not recently.

Mr. HELLYER: And the minister is saying the Canadian army has no operational requirement for the Caribou aircraft?

Mr. PEARKES: At present we have—I did not go as far as to say that.

The CHAIRMAN: At any rate, there is no money here.

Mr. PEARKES: There is no money here—and I have said the requirements of the United States are different to our own.

Mr. HELLYER: But you did not say you would not like it if you could afford it.

My next question is on helicopters; how many helicopters do we have in Europe?

The CHAIRMAN: In the army.

Mr. PEARKES: We have not any.

Mr. HELLYER: No helicopters?

Mr. PEARKES: I do not think there are.

The CHAIRMAN: In the army.

Mr. PEARKES: There are with the air force, but not with the army.

Mr. SMITH (*Calgary South*): What was the answer?

The CHAIRMAN: The answer was that there are no helicopters in the army, but there are in the air force.

Mr. PEARKES: Yes, I think I am correct in saying that. The army would have the facilities of them.

Mr. HELLYER: As you know, there is a running battle between air force and army with respect to small aircraft and helicopters.

The CHAIRMAN: We are checking the vote now.

Mr. HELLYER: This is army equipment, which is of vital importance to our troops overseas and to those of us at home who are interested in it.

Now, Mr. Chairman, the army has decided to acquire the Honest John, according to information published. This is a very heavy artillery launching weapon while the Little John is a much smaller and lighter one which is, in fact, air transportable. If we are trying to develop mobile tactical forces, why would we not consider the acquisition of the Little John, either in lieu of or in addition to the Honest John?

The CHAIRMAN: Is there any vote for the Honest John in this, Mr. Minister?

Mr. PEARKES: No, but we acquired the Honest John, and it is being used by the NATO forces. It was a weapon which was suggested as being the most suitable for the brigade role, and it had the approval of the authorities at SHAPE.

Mr. HELLYER: In respect to the general policy of Canadian forces, including the battalion which you told us you have available here to be transported by air anywhere in the world, is it not essential to have the type of equipment which easily can be carried by air in order to give the force greater flexibility? I was looking through the evidence given at the United States Senate in respect of these missiles.

The CHAIRMAN: You would like to get that on the record?

Mr. HELLYER: Yes. In reference to these missiles General Wood said:

This is designed specifically for airborne units because the Honest John which does essentially the same job is too big and too heavy for present transport aircraft.

Now he refers to the Little John and says it has essentially the same capability but is much lighter and for that reason has a airborne capability. My question is: why would they not be acquired by the Canadian army either in addition to or instead of the Honest John?

Mr. PEARKES: The Honest John is a brigade weapon which you might say takes the place of the medium artillery of previous years. That is a type of weapon which was given first priority in the requirements for the brigade. It is not intended that they should be transported by air in Europe. Regarding the battalion which is air transportable for UNEF operations, all the equipment of that battalion is air transportable.

Mr. HELLYER: Will it have anything comparable to this?

Mr. PEARKES: No.

Mr. HELLYER: In other words it will not be equipped with the latest and most up to date weapons.

Mr. PEARKES: Not this year; not so far as the Little John is concerned.

The CHAIRMAN: Let us get down to our business. We are away out of order.

Mr. HELLYER: Surely this is relevant. We are paying for an airforce to make the battalion transportable and obviously are not buying the type of equipment other people are getting in order to keep the troops up to date. Surely, this is relevant. It is an expenditure of public funds.

Mr. SMITH (Calgary South): This is somebody else's opinion.

Mr. HELLYER: I am quoting the opinion.

The CHAIRMAN: We have covered tanks, armoured fighting equipment and mechanical equipment including transport.

Mr. HELLYER: Before we leave this I would like some indication whether or not there is any contemplation in the next year or two of acquiring light

planes and helicopters and the type of equipment they would carry to make our troops mobile and flexible.

Mr. PEARKES: I can settle that in a moment. The question of acquiring helicopters for the army is under the most active consideration.

Mr. HELLYER: In addition to that, then, does the minister consider or has he considered the advisability of any other nuclear technical weapons such as the Davy Crockett?

Mr. PEARKES: The only weapon having an immediate nuclear capability which we are planning for in the Canadian army is the Honest John.

Mr. HELLYER: At an earlier meeting the question was raised of the Browning machine gun and the minister was going to obtain some additional information in respect of whether it is still in use or whether there would be an early replacement.

The CHAIRMAN: I am glad we are back on the subject.

Mr. HELLYER: Just because some equipment is not included in the estimates does not say it should not be.

Mr. PEARKES: You asked what weapons if any are replacing any of the Browning machine guns used by the Canadian army. It is planned to replace the .30 calibre Browning in due course by a machine gun of the 7.62 mm NATO standardized caliber. Preliminary studies are being carried out on some new machine guns which might meet the requirements. Consideration is being given to the replacement of the .5 calibre Browning in due course by a new heavy machine gun. As yet, no decision on the type of gun to adopt has been made; but various guns are being considered.

Mr. HELLYER: This is the very objection. Everything seems to be under consideration. These Browning machine guns are presumably only capable of rapid firing for a short period of time, and if a replacement is necessary, some of us find it difficult to understand, in expenditures of this magnitude, why a provision is not made for replacement of this basic equipment to keep our troops up to date. It is important. The amount of money spent for equipment has been declining rapidly. As was clearly shown in a graph shown in a magazine recently, if the present trend continues, within three or four years there will be no expenditures on equipment.

Mr. SMITH (*Calgary South*): Which magazine?

Mr. HELLYER: It was a graph in the *Saturday Night* magazine.

Mr. SMITH (*Calgary South*): There is an authority for you!

An hon. MEMBER: Pretty poor authority!

Mr. HELLYER: This is really a shocking thing to consider, that there are basic requirements which, in the opinion of many people, should have been made before now—or at least by now—and all we are told is that they are under continuing consideration, under study, and that the decision will be made in due course.

Mr. PEARKES: This year—

Mr. SMITH (*Calgary South*): I wonder if Mr. Hellyer made any of these decisions in his capacity as associate minister?

Mr. PEARKES: This year the automatic rifle, the FN(C2) is replacing all the Bren guns that we have. That is increasing the fire power very considerably. It is highly questionable whether it is necessary to go into the requirement of a heavy machine gun—and these matters cannot be decided on the basis of a magazine article, or anything like that.

Mr. HELLYER: I should hope not, Mr. Chairman.

Mr. PEARKES: It would take a lot of consideration. We have not got unlimited funds in this country to be spending money until we are certain that we are spending it in the right direction.



That is what I am trying to do—and I would rather go a little bit slow than go throwing the taxpayers' money all over the country on something which may not be absolutely necessary.

Mr. SMITH (*Calgary South*): Hear, Hear!

Mr. PEARKES: I am satisfied that our troops are well armed and are efficient.

Mr. HELLYER: The minister, I am sure, agrees that where we have troops in the front line who are not equipped with a nuclear capability, and where they could be faced with an overwhelming man-power superiority, they should have the greatest possible fire power made available to them. I hope he will keep this in mind as he is preparing his estimates for next year.

Mr. LAMBERT: Have you got the other half of the \$500 million?

Mr. HELLYER: Let us talk about sensible figures.

The CHAIRMAN: Construction or acquisition of building, works, land and major equipment—shall that item carry? Mr. Carter, you wish to ask a question? Which item are you on?

Mr. CARTER: Miscellaneous equipment, page 314. Having served in this "poor bloody infantry". I am interested in steel helmets. I brought one along.

The CHAIRMAN: Good.

Mr. CARTER: It does not fit very well.

Mr. CHAMBERS: Your head has got fatter since you got it.

Mr. CARTER: Could the minister say when the last model of that was first issued?

Mr. PEARKES: When the last model was purchased?

Mr. CARTER: Yes.

Mr. PEARKES: We have an adequate supply of steel helmets at the present time, and there is no money included for the purchase of another steel helmet. There are, in the different armies of the world, many types of steel helmet.

Mr. CARTER: Are you considering changing this type of steel helmet: has any consideration been given to that?

Mr. PEARKES: I am sure the army is looking into the possibility of a new type of steel helmet when present supplies are exhausted or considered inadequate.

Mr. CARTER: Is it not a fact that practically every other nation has discarded this type of helmet, for various reasons, because it does not give adequate protection and bobs all over the place when you run? It is a very unsatisfactory piece of equipment.

Mr. PEARKES: It was found very satisfactory in the last war, and saved a great many lives.

Mr. SMITH (*Calgary South*): I think Mr. Carter should explain why he did not return it when he left.

Mr. SPENCER: I wonder where he got this. It is a pretty good steel.

Mr. HELLYER: How do you spell "stee(a)l"?

Mr. CARTER: Is any consideration being given to changing it?

Mr. PEARKES: There are no plans for changing it this year. Like all other pieces of army equipment, the proper authorities are giving consideration to the improvement of various types of army equipment, as and when funds become available. This year there are no funds included for a new steel helmet.

Mr. CARTER: We are about the last army to be equipped with this type of helmet, are we not?

The CHAIRMAN: Any further questions?

Mr. CARTER: Yes, I am asking the minister whether we are about the last people now to discard this?

Mr. PEARKES: I have not the slightest idea.

Mr. CARTER: It is my information that we are.

Mr. PEARKES: There is a number of different types of steel helmet that I have seen in the armies of the world; and this is the one that is used by the Canadian army.

The CHAIRMAN: Are there any more questions on miscellaneous equipment? Have you any questions about any other pieces, Mr. Carter?

Carried?

Agreed to.

The CHAIRMAN: Ammunition and bombs? Carry?

Agreed to.

The CHAIRMAN: Does the item carry, gentlemen?

Agreed to.

The CHAIRMAN: We shall start with the Royal Canadian Air Force tomorrow morning at 9.30 in this room, thank you.

The committee adjourned.





JAN 16 1962

HOUSE OF COMMONS

Third Session—Twenty-fourth Parliament

1960

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SPECIAL COMMITTEE

ON

**DEFENCE EXPENDITURES**

*Chairman:* Mr. G. E. HALPENNY

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MINUTES OF PROCEEDINGS AND EVIDENCE

No. 20



FRIDAY, JULY 8, 1960

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Estimates of the Department of National Defence  
for the Fiscal Year 1960-61

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WITNESSES:

The Honourable George R. Pearkes, V.C., Minister of National Defence;  
Mr. E. Armstrong, Assistant Deputy Minister (Finance); Air Com-  
modore R. W. Desbarats; Group Captain G. H. Elms.

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY  
OTTAWA, 1960

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ON  
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Spencer,  
Webster,  
Winch.

Antoine Chassé,  
*Clerk of the Committee.*



## MINUTES OF PROCEEDINGS

House of Commons, Room 238-S.

FRIDAY, July 8, 1960.

(21)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Halpenny, Hellyer, Lambert, Macdonald (*Kings*), Parizeau, Smith (*Calgary South*), Spencer, Winch.—10.

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Air Commodore R. W. Desbarats, Chief of Finance, R.C.A.F.; Group Captain G. H. Elms, Director of Air Plans, R.C.A.F.; Mr D. B. Dwyer, Superintendent, Parliamentary Returns.

The Committee resumed from Thursday, July 7th, consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61.

Mr. Pearkes, Mr. Armstrong, and Air Commodore Desbarats, were questioned thereon.

Item 224 and part of 225 were approved.

And consideration of the said Estimates still continuing, it was adjourned until the next meeting.

At 10.50 o'clock p.m. the Committee adjourned to meet again at 3.30 o'clock p.m. Monday, July 11th, 1960.

Antoine Chassé,  
*Clerk of the Committee.*



## EVIDENCE

FRIDAY, July 8, 1960  
9.30 a.m.

The CHAIRMAN: We have a quorum, gentlemen. We are on page 314 of the estimates, the Royal Canadian Air Force, vote 224. It goes on to page 321, at which time it is vote 225, on construction or acquisition of buildings.

So we are on page 314, the civil staff, on vote 224. Are there any questions, gentlemen?

### ROYAL CANADIAN AIR FORCE

Item 224. Operation and Maintenance ..... \$536,737,000

Hon. G. R. PEARKES (*Minister of National Defence*): May I mention the reasons for the reduction here? There was a total decrease of \$1,374,370. This is due to a reduction of 410 positions in the authorized establishment, and a reduction of 132,021 man hours in the supply labour pool; and a reduction of \$100,000 in overtime paid.

I mention that to show that there has been a very definite effort made by the Royal Canadian Air Force to cut down and reduce the number of personnel who are employed.

The CHAIRMAN: Thank you, Mr. Minister. Are there any questions on page 314?

Mr. LAMBERT: Does the same consideration apply to the architects under the air force section, as applies to the army?

Mr. PEARKES: That is correct.

Mr. LAMBERT: Is there any indication as to the number of projects they are working on, or what particular requirement there might be for 16 architects for the air force?

Mr. PEARKES: Yes, there has been a need to employ additional outside consultants and architects in connection with the development of the air defence program which was announced a year ago, which includes two Bomarc, seven heavy radars, and the SAGE development.

The CHAIRMAN: Are there any further questions on page 314, or shall it carry?

Mr. HELLYER: Can we talk about the Bomarc under that?

Mr. WINCH: I was going to say, where does the Bomarc come in on the estimates?

The CHAIRMAN: I think the word just got in there.

Mr. PEARKES: No, the Bomarc is in under the estimates here, under "construction."

The CHAIRMAN: That will come along later. Shall page 314 carry? Agreed to.

The CHAIRMAN: Page 315, civil staff continued: instructors, chemists, technical officers, accountants, draftsmen, librarians, operating engineers. Are there any questions?

Mr. LAMBERT: Has there been any increase, or a transfer of work, on the question of maintenance of aircraft away from civilian contractors to staff of the air force?



In other words, certain lines of maintenance which previously had been done by civilian contractors, have they been drawn back within the service?

Mr. E. ARMSTRONG (*Assistant Deputy Minister (Finance), Department of National Defence*): There has not been any real change from the status of past years on this.

The CHAIRMAN: Are there any further questions on page 315, or may I carry?

Agreed to.

The CHAIRMAN: Page 316, civil staff continued: clerks of works, maintenance supervisors, radio operators, inspectors of stores, airport maintenance, airport mechanics, and so on—and some more gardeners. Are there any questions, gentlemen? Shall the page carry?

Agreed to.

The CHAIRMAN: Page 317, still civil staff; punched card equipment, caretakers, foremen, signals clerks, welfare supervisors.

Mr. SPENCER: Mr. Chairman, I wonder if we might get a little more explanation about these drivers. I notice that the salary that is paid to the driver in Moscow is more than three times what is paid to a driver in the United Kingdom—and considerably more than we pay to drivers here in Canada.

Perhaps we could have an explanation as to why it costs some \$5,722 for a driver in Moscow.

Mr. ARMSTRONG: The reason for this is that the payment to the driver—which is in Russian rubles—is converted at the official exchange rate, which results in a very high dollar cost. The official rate, I think, is 12 to 1; I am not sure. At any rate, it is an inflated value for the Russian ruble which, when translated into dollars, as shown in this estimate, appears to give a very high salary to the locally employed Russian driver.

The CHAIRMAN: He would make more money than Khrushchev, would he not?

Mr. HELLYER: Have you tried the open market?

Mr. SPENCER: Do I gather from that that labour in Moscow is paid, in relation to Canadian dollars, an amount as indicated by this particular item?

Mr. ARMSTRONG: I do not know that you could really come to that conclusion. I think this really gives you a false impression, by reason of using an exchange rate that has not any real relationship to the purchasing value of the two currencies. This is the official exchange rate.

Mr. WINCH: Actually, he is getting less than \$2,000 a year, if you want to put it that way.

Mr. SPENCER: Do we use the same medium of exchange in determining the value of automobiles for importation into Canada, and things of that kind?

The CHAIRMAN: We are not dealing with that. Are there any further questions, gentlemen, on page 317?

Mr. CARTER: I would like to follow that with a supplementary question. What is the going rate for drivers; does the Russian government pay the same rate for their drivers as we pay?

Mr. ARMSTRONG: I do not know whether or not they do—although this rate is fixed by the local situation, and I presume it has some relationship to what is paid by local employers for drivers in that country.

If this were converted at the appropriate exchange rate, the amount would be substantially less—I think probably under \$2,000.

Mr. SPENCER: Why do we not employ Canadian drivers?

Mr. ARMSTRONG: In Moscow we are obliged to employ locally engaged drivers.

Mr. SPENCER: Why?

Mr. ARMSTRONG: This is a requirement of the Russian government.

Mr. SPENCER: Do we require the Russians here to employ Canadians?

Mr. ARMSTRONG: No.

The CHAIRMAN: That question was asked yesterday by Mr. Hellyer, on the other item.

Mr. CHAMBERS: Do you know if this driver is in receipt of any other income from another source?

The CHAIRMAN: Are there any further questions on page 317? Shall the page carry?

Agreed to.

The CHAIRMAN: Page 318, still civil staff.

Mr. LAMBERT: Is the air force in line with the army, or national defence records—I understand that your pay records are all under IBM.

Mr. ARMSTRONG: No.

Mr. LAMBERT: You are using some automatic computing equipment?

Mr. ARMSTRONG: The army has an IBM automatic computer; the 650 is the particular piece of equipment that they have. But the other services do not. The navy use IBM punched card equipment here in Ottawa for auditing their pay accounts; but I do not believe the air force use any of this equipment. Their pay accounting is largely decentralized to their stations, and they do not use this type of equipment.

Mr. LAMBERT: Has any serious consideration been given to effecting, perhaps, the same economies in respect to the air force?

Mr. PEARKES: Yes; I can comment on that. Only within the last month this matter was brought to my attention, and I have asked for consideration to be given as to the advisability of installing a different system—the possibility of installing a more uniform system.

Mr. LAMBERT: Because, after all, the air force is not a stranger to IBM equipment, since its air material command is closely tied in with it. I was wondering, if the army had been using it, and it could be found to be effective for the air force, whether they could have centralized, tri-service pay records.

Mr. PEARKES: That is exactly why I have asked for an examination to be made on. A recommendation was put up to me only a short time ago, and I sent it back and asked them to consider it on a tri-service basis.

The CHAIRMAN: Are there any further questions on page 318? Shall the page carry?

Mr. SMITH (*Calgary South*): I have one or two questions here, if I may ask them.

The CHAIRMAN: On page 318 or 319?

Mr. SMITH (*Calgary South*): Page 318, with respect to the rather broad latitude you permitted us under the pay and allowances—if they are in order.

The CHAIRMAN: Would you like to wait until we clean up civil staff?

Mr. SMITH (*Calgary South*): I will be happy to wait.

The CHAIRMAN: Page 319; are there any further questions on civil staff, labourers, painters, glaziers, plumbers, steamfitters, down to welders?

Mr. LAMBERT: Is the air force system of carrying on its own sort of works maintenance the same as the army? It is my understanding that the army had dispensed with a good deal of the civilian employment that they had of a works maintenance nature, and transferred it either to some of their own service personnel, or civilian contractors as occasion arose. But I understand that the office is still on an entirely, pretty well do-it-yourself basis.

Mr. ARMSTRONG: I think it is true to say that each service operates under the same basic principle with respect to work to be done by contract and work to be done by their own personnel. The general principle that is applied in all services is that work will be done by contract where it is practical to do it.

On the repair side there are many areas of work where it is difficult to do it by contract—develop the detailed plans, and so on; and this type of work is done very largely by the personnel of the services. The army are organized slightly differently, in that they have works companies, as you know, across the country who do both the maintenance work and any construction work that is done by their own forces; they also supervise work that is done by contract.

The air force have their works organization right on the stations, and they have, in the last two years, had this organization examined in detail by the organization and methods branch of the civil service commission—and a number of changes are being made in it now. The changes have actually been decided on. All the staff changes that are required have not been made, because all the actual recruitment of certain types of staff has not been completed. They are coming in on the basis of a new program for putting more emphasis on preventive maintenance, and this is largely concerned, of course, with repair and maintenance of these works, and so on.

Not all, but certainly the vast majority of the work—construction work—is done by contract. The air force have a construction maintenance unit which is located in Calgary, and its main job is to do special construction jobs in isolated areas, and so on, under circumstances where it would be difficult and uneconomical to do it by contract. They also play the role, or function, of providing a training base for the tradesmen that fill in on the works establishments, and so on, on their stations.

Mr. LAMBERT: I am not so much concerned with what goes out to contractors and what stays within the service—but you get almost a division on this question among the services, and you find that the responsibility for a certain type of work is, say, that of the army in the one case, and then the air force—I should say the reverse, because I think the army do less. You find that the army will put it out to contract; but the air force will do it themselves, practically the same thing.

Mr. ARMSTRONG: It is possible that you would find this to some degree. As I say, each service works under the same general instructions in this respect. Naturally, in an operation of this kind the decision, to some degree, must be left to the local commander, and you may find some difference here, in that one commander may decide that in one case it is sensible to do it with his own personnel rather than to do it by contract.

The CHAIRMAN: Are there any further questions down to welders? May the item carry? Now we are on continuing establishment. As the minister said, that is down from \$44,131,370 to \$43,750,000.

You had a question on that, Mr. Smith?

Mr. SMITH (*Calgary South*): Yes, Mr. Chairman. I wonder if I could ask the minister, first of all, if he can give the committee any information with respect to a number of senior positions which I rather gather will, in a short time, have to be filled in the air force.

I could cite them. As an example, I believe that Air Marshal Slemon is at or near retirement. Is it considered that his term is to be extended?

I believe the chief of air staff is within a year of retirement. Perhaps you would not care to comment on it; but what I am interested in, sir, is whether there are any senior positions which are currently open that you are in a position to announce who will be likely to replace them.



Mr. PEARKES: No; there has been no announcement made, nor has any decision been made regarding the replacement of the senior officers that you mentioned.

My understanding is that Air Marshal Campbell and Air Marshal Slemmon both have approximately two years to go to complete their appointments.

Mr. SMITH (*Calgary South*): I am very happy to hear that. The next question is perhaps relevant to this. I have been rather close to this branch of the service, and I have had a feeling for some time that in our retirement policy we are inclined to release many of our serving officers—and this, of course, applies to all three services—at a point when they are reaching their maximum service value.

This has been an old chestnut amongst the services, the question of at what time should they be released. I recognize, of course, that you have to make way and provide a vacancy for younger officers coming up; but in this matter of turnover has any consideration been given to a system of permitting, in particular the senior brackets of officers, continuing the period of their length of service on a voluntary basis—on an optional basis, would be a better way of putting it?

Mr. PEARKES: There is an age limit, according to rank, which is fixed for necessary retirement. Any extensions beyond that age limit have to receive the approval of the minister. The minister has some discretion in that.

Mr. SMITH (*Calgary South*): The minister does have some discretion?

Mr. PEARKES: Yes.

Mr. SMITH (*Calgary South*): May I ask, then, with respect to air crews; we know of course, that we spend a great deal of money to put a fully trained pilot in an aircraft. With respect to the younger officers who are on either one of the two methods by which they can be commissioned, is there any suggestion that you are changing this principle?

Mr. PEARKES: No, I have not heard of any suggestions of change there.

Mr. SMITH (*Calgary South*): This question goes back to the question of turnover, which you made a reference to on page 384 of the committee's evidence: are you at all concerned about the turnover of air crews, or is it fairly stable?

The CHAIRMAN: That is page 384?

Mr. SMITH (*Calgary South*): Yes. Are you satisfied with the turnover of air crews, recognizing the cost to the country to train these crews?

Mr. PEARKES: Yes. It is essential that with these very fast moving aircraft the pilots—of fighter aircraft, particularly,—should of necessity be young men.

Mr. SMITH (*Calgary South*): I agree, of course.

Mr. PEARKES: And it is a turnover which is a rather rapid one, and it is expensive to keep it that way. But I think on the whole the balance is about true.

Mr. SMITH (*Calgary South*): I am interested in the turnover of the young men, frankly. I am a bit concerned that we are spending a great deal of money on the young pilots, and I am wondering if we are not perhaps losing too many of them at a point where they still could provide very useful service to us. This is not through retirement; but their voluntary intention of leaving the service.

Mr. PEARKES: There is nothing that we can do to hold a man when he has completed his term of service. That is, in time of peace. But the general trend is rather the other way, and we notice that in the numbers of airmen who are re-engaging after their first period. There has been a tendency that

way, and that is reflected in some of the increases in these estimates, because there is more stability in the services than there was a few years ago. I think that is a general change from war to peacetime conditions. It is noticeable in all three services that a higher percentage of men are re-enlisting.

Mr. SMITH (*Calgary South*): You say that so far as air crew are concerned you are not unhappy with the rate of turnover and you think it is normal.

Mr. PEARKES: I consider it is a normal rate.

Mr. SMITH (*Calgary South*): In respect of air search and rescue, are you giving any consideration to increasing the number of squadrons which would be made available, or are you considering any other system which would give a greater coverage for air search and rescue? In western Canada formerly you based your squadrons at Edmonton and they now are moved to Winnipeg. I suggest that this leaves an extremely wide gap in western Canada in the event that aircraft go down and air search and rescue is required.

Mr. PEARKES: In what we know as the western area there are three stations. There are stations at Winnipeg and Edmonton and in British Columbia at Vancouver.

Mr. SMITH (*Calgary South*): Have you not moved your squadrons out of Edmonton to Winnipeg?

Mr. PEARKES: There is a subsquadron left at Edmonton, not a full squadron. I should mention that this year we are acquiring a number of better aircraft, namely the Albatross which is an amphibious aircraft. They will be available this year. We are obtaining ten Albatross which will be distributed across Canada. I believe three of them will go to the western area.

Mr. SMITH (*Calgary South*): I am happy to hear that. I suggest there is a very wide gap in western command and from practical experience there has been some difficulty in obtaining aircraft for air search.

Mr. HELLYER: Is that the same Albatross Viscount Montgomery was referring to?

The CHAIRMAN: Net total civil salaries and wages. Are there any questions on that item?

Mr. CHAMBERS: There is an amount here recoverable from the United States air force.

Air Commodore R. W. DESBARATS, (*Chief of Finance*): These are the civilians we hire on behalf of the United States for the Pinetree radar which is financed by them but manned by us.

The CHAIRMAN: Are there any further questions on this?

Mr. SMITH (*Calgary South*): Yesterday, under the same item when we were discussing army pay and allowances, in reply to a question the minister said that when the civil service provided a pay increase this also applied to the armed services. I wonder if this is generally a happy situation in the eyes of the minister. Are the two brackets necessarily comparable. Is it not felt by the department that perhaps each should be considered in the light of its own respective need?

Mr. PEARKES: I have said it had been the custom that when the civil service received an increase consideration was given at the same time to an increase in the armed services. It always has been the practice to have the salaries in the civil service of Canada comparable to salaries which are paid generally in the country. The policy of the government is to be a good employer. That same policy applies to the armed forces. I do not say that they are very closely related, but we have a high standard of young men in the services who are required to do highly technical work—many of them—

and I feel they are entitled to adequate pay—taking into consideration the security they have in respect of pension schemes, clothing, medical services and that sort of thing—comparable to a similar type of man in civilian life.

Mr. SMITH (*Calgary South*): I am not at all questioning the necessity. I concur with what you have said. I would ask you, however, if there is any real logic in making pay increases in the armed services based necessarily on the allowances or pay awarded civil servants. You have said it is purely a custom and therefore I assume from that it would not be impossible to have either one of the two groups receive consideration separately.

Mr. PEARKES: It would not be impossible, but the two groups are comparable under conditions in the country as a whole. When there is a situation in the country as a whole which justifies an increase in the pay of the civil servants, a similar situation usually exists in relation to the armed forces.

Mr. SMITH (*Calgary South*): Is it possible then, because adjustments have been made in certain areas of the civil service, that similar pay adjustments might be made in similar areas of the armed forces.

Mr. PEARKES: That matter is under discussion at the present time.

Mr. CARTER: My question is on pay and allowances. In this connection I would like to draw the attention of the committee to appendix "A" on page 112 of the evidence. This table shows the effective loss of income by nonpayment of family allowances to overseas airmen. It shows that the leading aircraftsman suffers a net loss in income ranging from \$638.40 to \$1,536, depending on the number of children, while the wing commander suffers a net loss which ranges from \$190.20 to \$506.40. My question is: since the loss of income falls more heavily on the ones who can least afford it—the leading aircraftsmen—will the minister take steps to have this remedied.

Mr. PEARKES: This matter has been discussed with the department which is responsible for family allowances. It is a regulation in respect of family allowances over which we have no control. The situation has been discussed with them and it is still being discussed with them.

Mr. CARTER: I do not consider that to be a satisfactory answer, because it is just passing the buck from the army to family allowances, or from the Department of National Defence to the Department of National Health and Welfare. It is possible for the Department of National Defence to pay any allowance they want to, and if they want a pay and allowance in lieu of family allowance there is nothing to prevent them doing so.

Mr. PEARKES: This matter has been brought to my attention. We have studies going on with the Department of Finance at the present time to see whether or not some of these anomalies can be relieved.

The CHAIRMAN: Thank you, Mr. Minister. Are there any further questions on this page?

Mr. WINCH: On pay and allowances, could I ask the minister this question: if an officer in the air force has a desk job and spends a certain amount of hours in the air is there a special allowance?

Mr. PEARKES: There is flying time paid so that officers who temporarily are employed in some position which does not require them at that time to fly could be encouraged to keep up their ability to fly so that when they move to another position they will be able to carry on with the tasks which would be required in the new position to which they are going. Even in some of the so called desk jobs—particularly in the materiel side—it is necessary for officers who are not in a formation which is flying continually to be able to fly so as to test out equipment.



Mr. WINCH: How does this apply to officers who are not, as you would say, on a temporary desk job but because of their rank or their position are actually permanently on a desk job? Have you found it to be a practice that they also spend the required hours flying in order to draw the extra pay.

Mr. PEARKES: All personnel who are fit to fly do so. When I say fit to fly, I mean unless they have been grounded for medical or other reasons.

Mr. SMITH (*Calgary South*): Surely no officer who receives flying pay is permanently on a desk job because they are rotated.

Mr. PEARKES: They are all rotated. While they may be employed for one tenure of command, say three years, on a desk job, if there is a change of circumstances they might at any time be required to fly.

Mr. CARTER: Could the minister give the details of the flying pay, as to how much it is a month and so on.

Mr. PEARKES: It is \$100 per month.

Mr. CARTER: Extra flying pay.

The CHAIRMAN: Regardless of rank.

Mr. PEARKES: Yes. That is the maximum they can draw. They have to fly a certain number of hours.

Mr. WINCH: How many hours is it?

Mr. PEARKES: They can get up to 150 hours. That is the maximum.

Mr. WINCH: What is the minimum number of hours they have to fly in a month in order to get the pay.

Mr. PEARKES: Twenty-five hours a quarter.

Mr. WINCH: It may be an indirect approach, but members of the service have raised this question with me; that is, whether there is a policy or whether it is just a matter of the individual himself who has a desk job putting in his twenty-five hours in order to draw that \$100 a month.

Mr. PEARKES: There definitely is a policy that the flying should be kept up. I think it is important, from the point of view of command. Take, for instance, the air vice marshal in charge of training; he must be able to fly and must fly continually himself if he is to maintain the morale and inspire the young pilots. If you had an air officer commanding who never flew, then I think you would find the morale in the service would go down.

Mr. SMITH (*Calgary South*): Is this not the practice in all air forces?

Mr. PEARKES: Yes.

Mr. WINCH: I am not thinking of that type. I can agree with what you have said there; but let us take a senior officer who is stationed at command headquarters of NORAD. We have just lost a senior officer there. If he was on a training flight, why would he be on a training flight.

Mr. PEARKES: He was doing his flying time. He was in charge of operations and during that time he might be required to fly. If he does not keep his hand in and does not fly for two or three years he cannot get back that know-how at a moments notice.

Mr. SMITH (*Calgary South*): It is not the fall that hurts, it is the sudden stop. I think that is the expression.

Mr. WINCH: I do not want to be unfair, but I can tell the minister that whereas he says this is required for one reason—that is to keep up the morale in the service of the young pilots when they see senior officers putting in their flying time—that a great many of the young pilots in the service feel exactly the opposite, that they are doing it to be able to draw the extra \$100 a month.



Mr. PEARKES: I do not believe that. It is the policy to do it. You referred to the tragic accident which happened. I have known that officer since boyhood.

Mr. WINCH: I am sorry. I was not raising it in that way. I was raising it in respect of a person in that position at NORAD.

Mr. PEARKES: On that same day there was a young student pilot who was killed, I think in New Brunswick. How do you draw the line? Do you say that because a man has reached a certain age he should not take risks? It is a very difficult job and I think we have to look at it in a hard cold way and say we believe it is in the interest of the service that officers in command should be able to fly and continually practice flying both for the purpose of morale and purposes of knowledge and of being able to test out various forms of tactics and various equipment so that they can give advice from first hand information.

Mr. WINCH: Maybe so; but at the same time I would like to continue this a bit further. I have listened very carefully to the minister.

Mr. PEARKES: I resent the suggestion that these men are flying just to get extra pay.

Mr. WINCH: Let us take the case of a man in his late forties who has reached a certain rank because of his capabilities and is doing a required job on the ground. I cannot conceive of any situation where he actually would be required at his age to fly or where he could be used at his age, in this modern age, for the purpose of flying. Is it not an unnecessary risk to take the chance of losing this man with his ability and knowledge at his age by flying. I think there is a good argument there, because unfortunately we are losing senior officers.

Mr. PEARKES: It is with the greatest of regret that I notice we have lost two officers recently. From what I understand Air Vice Marshal Hodson was carrying out an essential test with another pilot. It was a United States air-force pilot who was with him. The United States pilot was the actual captain of the plane at the time. It was purely a mechanical malfunction which caused the captain of the plane to consider it was necessary to order the crew to bail out.

Mr. WINCH: Why do you risk the lives of the senior officers whose ability is so essential—not in this last fatality but in the one about three months ago—in a type of plane in which I understand there have been previous accidents.

Mr. PEARKES: No. The type of plane in which Air Commodore Stephenson went down in is a serviceable type of plane. It just so happened that something went wrong, as is the case in many accidents. The accident rate has been cut down very considerably.

Mr. WINCH: Mr. Smith, you know more than I do about airplanes and perhaps you could explain this better than I can.

Mr. SMITH (*Calgary South*): I have some sympathy for Mr. Winch. Would it be of any help to restrict senior officers to types of aircraft? This may destroy the argument that they must be able to fly any aircraft; but quite obviously a man who is in an aircraft which is generally described as a hot aircraft—an aircraft which has a high stalling speed—and with which he is not familiar, automatically exposes himself to certain risks, rather than if he flew something with more moderate characteristics. A Mitchell was not a simple aircraft to fly under any conditions.

Mr. PEARKES: I would not like to give the impression that there were a very large number of fatal accidents in Mitchells. In 1958 and 1959 the figures I have show that there was no Mitchell which had a fatal accident. In fact the

Mitchell in 1959 flew 14,088 hours. There was only one major accident and four minor accidents in that year. It has therefore recorded an accident rate of .35 which is almost the lowest or one of the lowest accident rates.

Mr. SMITH (*Calgary South*): You are not flying many Mitchells and for the most part they are being flown by 20-year old pilots, but nevertheless we have lost two air vice marshals in a period of two years in Mitchells.

Mr. PEARKES: That is not borne out in the figures I have. In 1958 and 1959, there were no fatal casualties on Mitchells. It must have been before 1958.

Mr. ARMSTRONG: It was in 1957.

Mr. CARTER: I would like to come back again to the point on flying pay.

Mr. CHAMBERS: On this point there are a number of senior officers whose main functions today may be administrative and responsibilities of command but they keep up their flying for the reason of retaining their knowledge of the aircraft they control. I am wondering if any consideration is given to placing a limitation on the type of aircraft they fly.

The CHAIRMAN: I think that is what Mr. Smith is after.

Mr. CHAMBERS: These officers are not in practice to the same extent as are these young officers who are flying all the time.

Mr. PEARKES: That might be a way of controlling the flying, but it is very difficult to suggest that one officer can take a risk in flying a type of aircraft and a more senior officer would be prohibited to do that.

Mr. HELLYER: Surely that would destroy the whole theory behind the practice. If officers are limited in the types of aircraft they can fly then that does not prepare them for command positions in operational squadrons and so on.

Mr. WINCH: Is there not a difference between a man flying all the time and those who do it only occasionally? I think there is a big difference there.

Mr. PEARKES: Yes.

Mr. CHAMBERS: Presumably we would not take a senior officer whose regular job is behind a desk and send him out on experimental aircraft. We would choose a pilot who was flying all the time.

Mr. SMITH (*Calgary South*): The difference between them is the physical reaction of a man 20 years of age and a man 45.

Mr. HELLYER: Has the minister considered the possibility of taking the Mitchells out of service? I know they still are used considerably but they are World War II aircraft and they have seen better days; they are expensive to operate and tricky to handle.

Mr. WINCH: That is not a fair question because our policy is obsolete now.

Mr. CARTER: I would like to come back to the matter of flying pay. Can this be spread over the whole year in such a way that the flying officer can get an extra \$1,200 income, or is there a ceiling on the amount? Is it on a monthly basis?

Mr. ARMSTRONG: Yes. The maximum amount is \$100 a month.

Mr. CARTER: It is possible to earn an extra \$1,200 a year?

Mr. ARMSTRONG: Certainly.

The CHAIRMAN: And most of them get the maximum?

Mr. ARMSTRONG: I would think the majority would get the maximum when they are keeping their hand in flying.

The CHAIRMAN: Are there any further questions on pay allowances?  
Agreed to.

The CHAIRMAN: Page 320, professional and special services: corps of commissionaires and other services. Are there any questions, gentlemen? It is up some since last year.

Mr. CARTER: You moved ahead of me. I was going to ask the minister if he would give us a breakdown of pay and allowances the same as he did in respect of the army.

The CHAIRMAN: Yes. We can do that.

Mr. PEARKES: Do you want that?

The CHAIRMAN: We could put it on the record.

Mr. PEARKES: I will put it on the record.

The CHAIRMAN: Thank you.

Pay and Allowances—RCAF—1960-61

Particulars	1960-61	1959-60	Increase or Decrease
	\$	\$	\$
Basic, Progressive and Group Pay.....	145,848,072	144,953,528	+ 894,544
Subsistence Allowance.....	26,598,156	25,343,376	+1,254,780
Ration Allowance.....	4,965,390	5,045,280	- 79,890
Marriage Allowance.....	12,301,740	11,743,410	+ 558,330
Separated Family Allowance.....	1,425,552	1,235,208	+ 190,344
Aircrew and Risk Allowance.....	9,145,560	8,787,660	+ 357,900
Isolation Allowance.....	1,100,205	1,088,007	+ 12,198
Other Allowances.....	7,891,325	7,297,531	+ 593,794
TOTAL.....	209,276,000	205,494,000	+3,782,000

The CHAIRMAN: At page 320 in respect of the item covering corps of commissionaires and other services.

Some hon. MEMBERS: Agreed.

The CHAIRMAN: In respect of the item covering architects and engineers and consultants fees are there any questions? Have you any questions Mr. Lambert?

Mr. LAMBERT: No.

The CHAIRMAN: Under the item covering medical and dental consultants and special services are there any questions?

Mr. PEARKES: May I make a comment in regard to the medical and dental item?

The CHAIRMAN: By all means.

Mr. PEARKES: One is sometimes asked whether this tri-service medical organization, which we instituted a year ago, is working towards economy. You will find that there is, even in this first year, some reduction there. I just mentioned that because the committee on estimates urged us to have this instituted, and the medical estimates, in spite of the fact that hospitalization has gone up, particularly hospitalization with the veterans affairs hospitals—it has gone up a considerable amount—we still have been able to show some decrease.

Mr. SMITH (Calgary South): I am happy to see that, Mr. Minister.

The CHAIRMAN: That shows that the estimates committee was of some use last year.

Mr. PEARKES: I thought the members would be interested in that.

The CHAIRMAN: Are there any questions in regard to the item covering fees for special courses?

The next item is operation of R.C.A.F. establishments and provision of facilities by contracts.

Mr. SMITH (Calgary South): What is this, Mr. Minister?



Mr. PEARKES: This is mainly the operation of the mid Canada line. Because of improved techniques and the experience which has been gained over the years it has been possible to make a very considerable reduction in this item.

The CHAIRMAN: Are there any further questions in that regard?

The next item is travelling and removal expenses. Are there any questions gentlemen?

The next item is freight, express and cartage. Are there any questions?

The next item is postage.

We now come to telephones, telegrams and other communication services.

The next item is publication of departmental reports and other material.

The next item is exhibits, advertising, films, broadcasting and displays.

The next item is office stationery, supplies, equipment and furnishings.

We now come to materials and supplies, including fuels, etc. Are there any questions? The items listed under this heading include fuel, clothing, gasoline, food supplies, etc. Are there any questions in regard to these items?

Mr. SMITH (*Calgary South*): In regard to miscellaneous materials and supplies, perhaps it might be worthwhile to have the major items listed. This amounts to \$6,540,000.

Mr. PEARKES: This item includes paint, packaging, preservation, storage of materials, metals, and general hardware, dependent school supplies, which is quite an item, and miscellaneous barrack, hospital cleaning materials and photographic materials, etc.

The CHAIRMAN: Thank you Mr. Minister.

The next item is repairs and upkeep of buildings and works including land and amounts to \$125 million.

The next item refers to repairs and upkeep of equipment.

The next item is municipal and public utility services. Are there any questions?

The next item covers pensions, superannuations and other benefits for personnel services.

The last item covers other expenditures, and I notice that it is down from last year.

Now we deal with the Royal Canadian Air Force (reserve).

Mr. SMITH (*Calgary South*): I have a question to ask here, Mr. Minister.

Perhaps the minister has some comment to make with respect to the policy of the reserve? If you have no comment I will be happy to ask my question.

Mr. PEARKES: I think it would be advisable for you to ask your question and then perhaps I can answer it.

The CHAIRMAN: It would be of help if you would.

Mr. SMITH (*Calgary South*): I thought you might anticipate my question, Mr. Minister.

The reserve has a responsibility now and is taking part in a new role, and has been for the last two year period. I would like to ask, sir, whether you consider that this is a vehicle which you hope to use as a form of recruitment to any substantial degree?

Mr. PEARKES: Yes, we wish to maintain the squadrons, particularly those which are connected with the survival operations. I believe they will have an important function to carry out both in connection with rescue work and reconnaissance in connection with the survival operation.

Mr. SMITH (*Calgary South*): In the United Kingdom, as you are aware, sir, they have eliminated their auxiliary squadrons. We are maintaining ours because of rather different circumstances, and primarily in respect of survival, is this correct?

Mr. PEARKE: Yes. I think one of the differences is the extent of our country, which is so much larger and vaster than the confined conditions of the United Kingdom.

Mr. SMITH (*Calgary South*): Do you hope in the foreseeable future to be able to equip our squadrons; and I know you have made some reference to this already, but can you give us any time table on when you will have the squadrons equipped with the Expeditor so that they will be able to carry out their roles more adequately?

Mr. PEARKE: We have an order providing for 27 Otter aircraft.

The CHAIRMAN: We will have more information in that regard later, Mr. Smith.

Mr. SMITH (*Calgary South*): I will wait until we reach that point then.

The CHAIRMAN: Are there any further questions in regard to the Royal Canadian Air Force (reserve)?

The next item to consider is the Royal Canadian Air Cadets.

Mr. SMITH (*Calgary South*): I wonder if the minister has the number of air cadets available who have gone into the armed services in the last year?

The CHAIRMAN: Are you referring to the group you took overseas last year, Mr. Smith?

Mr. SMITH (*Calgary South*): Not entirely, Mr. Chairman.

Mr. CHAMBERS: He is the den mother.

Mr. SMITH (*Calgary South*): Thank you for the commercial.

The CHAIRMAN: You are welcome.

Mr. PEARKE: To what extent this was due to Mr. Smith's influence I do not know, but in the past calendar year 555 ex-air cadets were enrolled into the RCAF regular, 135 as officers and 420 as airmen.

Mr. HELLYER: How much less is that than previously?

Mr. PEARKE: How much less? I have not got the actual figures here, but there has been a steady increase. It was a noticeable increase last year.

Mr. HELLYER: Notwithstanding Mr. Smith.

Mr. SMITH (*Calgary South*): I hate to appear as a witness, as Mr. Hellyer continues to do, but I can tell him he is correct only because, of course, the requirements for the air force are somewhat lower this year.

The CHAIRMAN: Are there any further questions in regard to this item?

It is now 20 minutes to eleven. Shall we go along a little bit faster and stick a little closer to the items, perhaps until quarter to eleven.

Mr. HELLYER: Or five to eleven.

The CHAIRMAN: That is all right with me.

The next item is construction or acquisition of buildings, works, land and major equipment.

Mr. HELLYER: This would include the acquisition of land and construction of the Bomarc sites. This whole Bomarc program still is, in the opinion of many people, very questionable. I think the minister should give us some further reassurance in respect to it. First of all, as he well knows—

The CHAIRMAN: Just a minute, Mr. Hellyer. Let us stay away from statements and ask questions. What would you like to know about the real properties that have been purchased?

Mr. HELLYER: Well, the real properties are completely vulnerable to an enemy missile, and by the time this whole system is—

The CHAIRMAN: What is your question?

Mr. HELLYER: Well, if you could have—

The CHAIRMAN: May I have your question, please?

Mr. HELLYER: Yes. The question is; why would the Canadian government spend this amount of money on this system when the whole thing could be rendered useless by enemy missiles?

The CHAIRMAN: That is a suggestion only, Mr. Hellyer.

Mr. HELLYER: I think that is a question.

Mr. SMITH (*Calgary South*): I am surprised he does not read the United States senate report.

Mr. PEARKES: I do not agree with the statement made by the member that the entire system could be destroyed by enemy action. Considering the distance from Russia to this country, the likelihood of the Bomarc missile bases being considered as a target for hostile intercontinental ballistic missiles, taking into consideration the size and locations of the Bomarc stations, is not only extremely remote, but is practically negligible.

Mr. HELLYER: May I ask how much of this \$667,000 is for Bomarc sites, Mr. Minister?

Mr. PEARKES: The land has already been purchased, so none of this is in regard to that.

The CHAIRMAN: It is possibly for the construction of buildings and work?

Mr. PEARKES: Yes, that is where it would be involved.

The CHAIRMAN: Are there any further questions?

Mr. HELLYER: Mr. Chairman, the minister's reassurance in my opinion is not satisfactory because it is in direct contradiction to testimony given by a great number of people. Let me, if I may, just read one of the quotations from the United States senates evidence Senator Symington—

The CHAIRMAN: This is actually out of order. What is your question? This may be important in your mind, but possibly not too important to anyone else.

Mr. HELLYER: Senator Symington is asking the questions of General Wright. It says:

"It (Bomarc) is a sitting duck on these large bases with sixty missiles on each—  
and then it goes on:

How about that!

General White: I think that is true. It is vulnerable, yes.

Mr. SMITH (*Calgary South*): I wonder if you would be kind enough to read, as has been done before, the views of the other generals with respect to the Bomarc. You might just as well present the other side of the argument.

The CHAIRMAN: Let us get down to the actual item.

Mr. WINCH: Could I ask how much this item is involved in the Bomarc?

Mr. PEARKES: \$8 million is included this year.

Mr. WINCH: \$8 million?

Mr. PEARKES: \$8 million.

Mr. WINCH: I move that this vote be reduced by \$8 million.

The CHAIRMAN: Have you any questions Mr. Hellyer, in respect to the Bomarc sites?

Mr. HELLYER: Yes. I would like the minister to tell us how many additional squadrons of Bomarc installations would have to be increased by if they are not to be armed with atomic weapons, in order to be of equal effectiveness?

Mr. PEARKES: There is no intention to increase the number of launches, or the number of Bomarc squadrons.



Mr. HELLYER: I am afraid the minister misunderstood my question, Mr. Chairman.

The CHAIRMAN: I do not think he did, Mr. Hellyer.  
Do you have any further questions, Mr. Hellyer?

Mr. HELLYER: Yes. This is, of course based again on expert testimony to the effect that the increase, to bring the squadrons armed with high explosive warheads up to equal, would be enumerable. I wonder if the minister could tell us how many squadrons he would have to install in order to do the same job, if they are not equipped with atomic warheads?

Mr. PEARKES: All I can say is that there is no intention to increase the number of Bomarc squadrons beyond the two that have been agreed upon at the present time.

Mr. HELLYER: Does the minister feel that he should ask us to vote funds for a launcher which implicitly, at least by his own admission, is of no effect without atomic warheads?

Mr. PEARKES: I never said it has no effect without atomic warheads. As the Prime Minister has stated over and over again, negotiations are going ahead so as to have the atomic weapons—atomic warheads—available if and when they are required. If they are required they will be used under the authority of the Prime Minister of the day.

Mr. HELLYER: Mr. Chairman, this does not seem to be in accordance with United States law.

Mr. CHAMBERS: Let us have this legal opinion a little more amplified.

Mr. HELLYER: It would seem rather difficult to understand why, when according to the Minister of External Affairs no final negotiations have been carried on the minister can expect an agreement before these missiles are put into use. We want to know what the government policy is. Are you going to have atomic missiles on them? Are they going to be kept by the United States under lock and key, and will they be under the control of a United States officer? Will you have to phone the president of the United States if there are bombers coming down and want to use them to defend Canada?

Mr. CHAIRMAN: That has already been answered before.

Mr. HELLYER: It has not been answered before, Mr. Chairman, or I would not be asking the question.

Mr. PEARKES: It has all been answered before. It has been answered and repeated again and again by the Prime Minister. Arrangements are being made so that if nuclear warheads are required they will be available, and they will only be used with the authority of the government of Canada.

Mr. HELLYER: The Minister just said: "If they are required".

Mr. PEARKES: If and when they are required.

Mr. HELLYER: If these Bomarc launchers are installed, will they be required?

Mr. PEARKES: They won't be required unless the enemy come over here. We are not going to fire them up into the air just for the fun of it.

Mr. HELLYER: But you are not going to go to Washington to get them when the enemy arrives.

The CHAIRMAN: This is one of those "if, if, if," situations.

Mr. HELLYER: That seems to be typical of our defence policy.

The CHAIRMAN: It is typical of the questions you are putting Mr. Hellyer. Have you any further questions in regard to the item governing acquisition and construction of buildings?

Mr. HELLYER: Yes, Mr. Chairman. Coming back to the location of the site at North Bay, I am still not satisfied as to why it is so close to the city of North Bay. Could the minister explain that?

The CHAIRMAN: Your question: Why is it located so close to North Bay?

Mr. HELLYER: Yes.

Mr. PEARKES: The site was chosen so that it would link in with the other Bomarc stations. There are some very technical reasons for that particular site being acceptable. Also, this property is owned by the government and therefore did not have to be purchased.

It is not particularly close, it is located some seven or eight miles from the town of North Bay.

Mr. HELLYER: Is the minister stating that a site five or ten miles further from the city would have been unacceptable for technical reasons?

Mr. PEARKES: It might have been. I do not know what site you are talking about. The fact that a site was ten miles away from the city would not make it unacceptable, but there might be conditions in the lay of the land which would make it unacceptable.

Mr. HELLYER: Is it true to say that the site was chosen because it was already owned by the government, and because there were existing facilities there?

Mr. PEARKES: No, that site was chosen for operational purposes. The land was available in that immediate area, and it was owned by the government.

Mr. HELLYER: A site a few miles further from the city would not have been equally acceptable?

Mr. PEARKES: A site a few miles away from the city would probably have been just acceptable for technical reasons but not for economic reasons. We owned the land there. It is adjacent to a highway, and it is close to an air station. This reduces the amount of money that has to be spent on quarters, because the personnel can live in the quarters at the North Bay air station.

The CHAIRMAN: Gentlemen, I think we will have to stop now.

Mr. CARTER: I just would like to ask one question.

The CHAIRMAN: One question, fine.

Mr. CARTER: Could the minister say why he thinks there is only a slim chance that these bases could be destroyed by enemy missiles.

Mr. PEARKES: Why I think what?

Mr. CARTER: Why you think there is a slim chance of the bases being destroyed?

Mr. PEARKES: There is very little chance of their being destroyed because the Russians have only a limited number of intercontinental ballistic missiles and they will surely use those against prime targets which would include SAC bases in the United States. They would be the natural primary targets. The Bomarc is a weapon to defend us against bombers.

Mr. HELLYER: The Russians will have a lot more intercontinental ballistic missiles before we have a defence.

Mr. PEARKES: Then perhaps we will not need them.

The CHAIRMAN: I suggest that we meet on Monday at 3.30 and Wednesday afternoon at 3.30.

Mr. HELLYER: Mr. Chairman, at this stage of the proceedings could I inquire as to when it is the intention of this committee to hear other witnesses, if at all, or is it true to say that there never has been any intention on the part of the government to allow other witnesses to appear?

Mr. PEARCES: The government has nothing to do with that.

The CHAIRMAN: You attended at the steering committee, Mr. Hellyer, and you know exactly the way that committee felt about this suggestion. We will discuss this again at another steering committee meeting.

Our next meeting will be on Monday at 3.30 p.m. gentlemen.

Mr. HELLYER: I felt like what they call a "hanger on" at the steering committee.

The CHAIRMAN: O'k, hanger on.

Gentlemen, we will meet again at 3.30 Monday afternoon.

The committee adjourned.





## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.  
MONDAY, July 11, 1960.  
(22)

The Special Committee on Defence Expenditures met at 3.30 o'clock p.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Halpenny, Hellyer, Lambert, Morton, Parizeau, Roberge, Spencer, Winch.—10.

*In attendance:* Honourable George R. Pearkes, V. C., Minister of National Defence; Mr. E. Armstrong, Assistant Deputy Minister (Finance); Air Commodore R. W. Desbarats, Chief of Finance, R.C.A.F.; Group Captain G. H. Elms, Director of Air Plans, R.C.A.B.; Mr. D. B. Dwyer, Superintendent, Parliamentary Returns.

The Chairman explained that he had on Friday last misunderstood the motion of Mr. Winch. However, as no seconder was on hand, the said motion of Mr. Winch could not be recorded.

However, the Chairman invited Mr. Winch to repeat his motion, if he could find a seconder, whereas Mr. Winch, seconded by Honourable Paul Hellyer, moved that the Committee recommend that the amount apportioned to Bomarc under Construction and Works contained in item 225 of the Estimates under study be reduced by \$7,999,999.

After discussion, and the question having been put thereon, the proposed motion of Mr. Winch was resolved in the negative on a show of hands on the following division: Yeas, 4; Nays, 5. The Chairman declared the motion lost.

Mr. Pearkes was again questioned at length.

Consideration of item 225 of the said Estimates was continued, completed and finally approved.

And consideration of the Estimates of the Department of National Defence for the fiscal year 1960-61 still continuing, it was adjourned until the following meeting.

At 5.00 o'clock p.m. the Committee adjourned to meet again at 3.30 o'clock p.m. Wednesday, July 13th.

Antoine Chassé,  
*Clerk of the Committee.*





## EVIDENCE

MONDAY, July 11, 1960.  
3:30

The CHAIRMAN: Gentlemen, we now have a quorum. I wish to apologize to Mr. Winch for misunderstanding him at the last meeting.

Mr. Winch will notice when he gets the printed evidence that he said "I move that this vote be reduced by \$8 million".

We were talking at that time about the Bomarc installation, and I thought that Mr. Winch said "I vote that this \$8 million be reduced". But Mr. Winch actually was moving at that time, and if it is his intention to make the same motion today, I suggest that he reduce it by \$7,999,999, that is, bring it down to \$1.

I apologize to Mr. Winch for misunderstanding him.

Mr. WINCH: I appreciate the remarks you have just made, Mr. Chairman, although I cannot quite understand the splitting of hairs, and the \$1. However, it was not meant as a facetious statement on my part.

I completely understand your precedent, that we are not supposed to make statements, but only to ask questions. However, if one is to move for a reduction in estimates, it is most necessary, Mr. Chairman, to make a very brief statement.

A few moments ago I drafted a statement which is very short, and I hope I may be permitted to give it to you, so that I may then re-move the motion which I moved the other day.

The CHAIRMAN: Very well, you may proceed.

Mr. WINCH: My statement is this:

The only conceivable use of the Bomarc is to be part of the defence against all-out air attack. It is senseless to think that an air attack on this continent would be less than all-out for an aggressor would be mad thus to trigger the U.S.A.'s retaliatory forces without going all-out to destroy them.

But in the event of all-out attack on this continent no amount of air defence will prevent sufficient thermonuclear weapons getting through to destroy the nation. The Bomarc, therefore, is useless. Only deterrence, pending complete and universal disarmament, makes sense.

For these reasons, I therefore move that this item in the estimates be reduced by \$8 million, the appropriation set for this year's expenditure on the Bomarc.

The CHAIRMAN: Have we a seconder, or any comments?

Mr. HELLYER: It is just a question of order. Is it in order to move a reduction of estimates in this committee, due to the fact that we are merely considering estimates and do not have the authority of the whole house to deal with estimates?

The CHAIRMAN: No. I think the way it should be done is that we would say in our report that Mr. Winch moved that the amount be reduced. That would be our recommendation merely to the committee of the whole, and they, in turn, would have to go on from there. That would be my understanding of it, and I think it is correct.

Mr. WINCH: If this committee is sitting here to consider estimates, we have no power to increase them; and if we have no power to reduce them either, then why in the world are we sitting here?

The CHAIRMAN: By the same token we have, as I understand it, authority to recommend to the house as a whole an increase in those estimates if we consider them to be insufficient.

Are there any further comments?

Mr. CHAMBERS: Is there a seconder?

The CHAIRMAN: Not yet.

Mr. HELLYER: If, by this motion, it is meant a recommendation to the committee of supply, and if according to the terms of reference this committee operates under a reference, but has no authority in respect to the voting of public monies—if that is what Mr. Winch meant, merely that this committee is to go on record by way of a recommendation to the committee of supply, then I would second his motion.

Mr. WINCH: That is all I can do.

Mr. HELLYER: But at the same time, I am not agreeing with him in his statement. The reason I have to do this is quite obvious, since I have also moved for the same reduction, the same motion, in the House of Commons, in the committee of supply earlier this year; and this raises an additional question as to the technical aspects of raising a motion which has already been decided once by the committee of supply on this very same subject.

Mr. WINCH: What does Mr. Hellyer mean when he says that he moved it in the committee of supply? The estimates for defence are not yet called.

Mr. HELLYER: That was in committee of supply under consideration of interim supply, the first two-sixths of the year's appropriation.

The CHAIRMAN: Gentlemen, this is my understanding of it. As you all appreciate, I do not attempt to be an authority on the matter, and if you would rather, if it is your wish to hold it over, we may get a ruling on it. But my understanding is that we have authority merely to recommend to the committee of the whole anything we so desire.

Have you any thoughts on it?

Mr. WINCH: The report of this committee will be a recommendation?

Hon. G. R. PEARKES (*Minister of National Defence*): I was going to suggest that a better time to discuss this would be when you are drawing up your report.

The CHAIRMAN: Yes.

Mr. PEARKES: And if you wish to include that in your report, I think that would be the right time to do so.

Mr. WINCH: I understand that it is absolutely impossible, and for one reason: you are going through these estimates item by item, and when we hit the end of the items, you say "shall it carry?" Therefore, if you disagree with it, being carried, you have to make your motion, otherwise you will be considered as concurring with the items.

The CHAIRMAN: I do not think it matters whether you do it now or just before we come to write our report. Our feeling is that we do have the power—if this committee votes on your motion here—to insert that recommendation in our report.

Mr. WINCH: You also agree, because of the way you put the question on the different items, that we have to take a vote now?

The CHAIRMAN: If there is any doubt in any person's mind as to the legality of it, I would be willing, if you are willing, to hold it over so that we may get a ruling.

Mr. CHAMBERS: The motion is not properly before the committee at the present time because it has not been seconded.

The CHAIRMAN: No.

Mr. HELLYER: I said that I would second the motion if it was on the basis of a recommendation to the committee of supply; but I am not just clear yet as to what was said by the chairman; that is, whether we are in order in doing this or not.

The CHAIRMAN: My interpretation of the order of reference is—and I have read the rules on committee procedure—that if Mr. Winch moves his motion now, and you second it, then it will be included in our report to the committee of the whole, in our recommendations.

Do you agree with that understanding, Mr. Hellyer?

Mr. LAMBERT: Providing it carries.

The CHAIRMAN: Yes, that is what I say, providing it is carried.

Mr. HELLYER: This might be mentioned whether the motion is carried or not.

The CHAIRMAN: That is not necessary. It is entirely up to the committee at that time to decide.

Are there any further comments in respect of the motion?

Mr. CHAMBERS: If the motion is properly before the committee I would like to make a comment.

The CHAIRMAN: Yes, Mr. Hellyer as I understand it seconded the motion.

Mr. CHAMBERS: Mr. Chairman, I think this motion and a great many of the comments that have been made before this committee on the question of the Bomarc result from a pretty complete misunderstanding of the purpose of this weapon, and in fact the whole tactics and strategy of the North American air defence. It has been said that the Bomarc B will not prevent an intercontinental ballistic missile from hitting a target in North America. This is true. At the same time we read in the newspapers just last weekend that another test of the Bomarc B had knocked down the supersonic Regulus missile.

Mr. WINCH: A sub-sonic.

Mr. CHAMBERS: What I read was "supersonic".

However, the purpose of the Bomarc B is to protect the targets on this continent from manned bombers. Now, Mr. Winch in his preamble, or in his statement before his motion pointed out that any attack on North America would be an all-out attack. I would have to agree with him, that any aggressor would be crazy to attack North America without putting forward everything he had in the foreseeable future, and that would definitely include the manned bomber. All the evidence that we have heard before this committee from the minister, and that which we have read in the newspapers as having been given before the United States congressional and senatorial committees, points to the fact that the military experts on this continent expect that any all-out attack on North America would include manned bombers.

Now, to say that because the Bomarc B is not effective against anything except the manned bomber, and therefore, should be abandoned, is like saying a steel helmet should be abandoned because it will not protect a man against a direct hit of a high explosive shell. The Bomarc B is part of the defence of North America and is part of the deterrent, because in today's circumstances the manned bomber could carry a much heavier load of destruction. It has a far greater degree of accuracy, and it has a much greater flexibility in its choice of target, and therefore, it is certain that bombers will be used.

Now, if in the defences that are set up on the North American continent, which include such things as the Bomarc B and the interceptors, and so on, we can demonstrate to any potential aggressor that he would not be able



to get through with enough of his attack to destroy the deterrent force, which are those of the strategic air command, and if the aggressor knows that he would not be able to destroy those forces he could make no rational decision to attack. Therefore this defence force such as the Bomarc and the warning lines, and so on, that go along with them, are an integral and vital part of that deterrent. If we were to give up our air defence against bombers we would be saying to any potential aggressor that if he starts first he could destroy us completely on the ground. This would leave the North American continent completely in his hands.

So, the question comes down to two things: first of all, whether we should have an air defence against manned bombers, which I think is demonstrably required in order to protect the targets that will be chosen by an aggressor, which we expect will be, first of all, the deterrent force. Secondly, having decided that we need an air defence of this sort, what means should be used to effect it? The means chosen at the present time are these anti-aircraft missiles such as the Bomarc B and the interceptors. It has been pointed out by, I think every military expert who has testified, that although neither of these is a complete defence in itself, each is complementary to the other, and both systems are required for an acceptable level of defence against air attack on the North American continent. For this reason I think that it would be completely wrong and facing ourselves with misunderstanding of that vital problem if this motion was adopted.

Mr. WINCH: Could I ask a question, Mr. Chairman?

The CHAIRMAN: Yes, by all means, Mr. Winch.

Mr. WINCH: My question through you is; in view of this most interesting statement which we have just heard, and in view of the fact that we have only had one defence expert give any evidence before the committee, and that is the minister himself, does the committee therefore gather from what the previous speaker has just said that he disagrees with the evidence given to this committee time after time, namely, the evidence of Major General Peakes, that the only real defence of the North American continent is the deterrent value of the retaliatory force of a missile nature from the United States? He cannot have it both ways. Does he disagree with the reiterated statements of the minister that that is the only deterrent?

Mr. CHAMBERS: I thought, Mr. Chairman, that I had made myself clear. The deterrent, as the minister has stated, is composed today of two things; the strategic air long range bombers and the missile forces.

Mr. WINCH: Do you agree with the minister's statement that the only defence of Canada is the deterrent retaliatory defence of the United States? Do you agree or do you not agree with that statement?

Mr. CHAMBERS: I agree one hundred per cent, and that is why—

Mr. WINCH: Why do you oppose this motion then?

Mr. CHAMBERS: That is why I oppose the motion, because if there was no air defence the strategic air command could be destroyed on the ground and there would be no deterrent. Therefore we must defend the air space of North America against forces trying to destroy the strategic air command with the retaliatory force as well as, of course, to defend the populated areas of the country.

The CHAIRMAN: Are we ready for the question, gentlemen?

Mr. HELLYER: Before we have the question, Mr. Chairman, I think the parliamentary secretary has made the best case possible in favour of the motion.

Mr. WINCH: So do I.

Mr. HELLYER: He has stated that this system would only come into effect in the case of an all out attack, and also that any such attack would have to be as a result of a rational decision by the enemy that they were in the position to wipe out the major portion of the retaliatory capacity of the west, namely the United States. He is thereby saying there is no likelihood of any rational attack until such time as the Russians would have the capability of knocking out, on the ground, the major portion of the retaliatory power of the United States. At that time they would have sufficient nuclear capacity in the form of missiles of all kinds, both intercontinental ballistic, submarine launched and air to ground launched missiles, to knock out certainly any fixed missile bases that they felt must be knocked out as part of their attack at the initial stage. This is exactly the reason which has been given by the Liberal party for opposing the Bomarc installations. In the event of such an all out attack it would be an obvious thing for the Russians to set as their first targets as they approached the North American continent by air with a missile attack, the Bomarc fixed installations, and it would not be reasonable to expect these fixed installations to survive an initial attack. Therefore, the defence provided by them and the return effect is nil. As the minister himself admitted in the House of Commons last year when we were questioning him on this subject, the Bomarc is not able to distinguish between a decoy launched from a bomber and a real missile. Consequently the Bomarc missiles themselves could be expended in chasing decoys, but as soon as the initial component is used up there is nothing left in an air corridor that is open and through which an enemy bomber fleet might fly.

The CHAIRMAN: Would you tell me about the Niki Zeus?

Mr. HELLYER: We have not any. As far as Canadian air defence is concerned, or as far as its contribution to the defence of the United States is concerned, in the event of all-out attack, such as was hypothecated by the parliamentary secretary, the Bomarc missile would offer no possibility of any defensive action.

The CHAIRMAN: That is why you second the motion? Are we ready for the question, gentlemen?

Mr. CARTER: I would just like to say one or two words in reply to what Mr. Hellyer said. I think that he gave a very wrong impression to anybody who might read the evidence of this committee. The Bomarc is not a complete defence; it is only a partial defence, meant to supplement the manned interceptor. It is only effective with nuclear warheads—it only has maximum effectiveness with nuclear warheads, and can only be effectively used when the Sage is operating properly. Naturally, an enemy would try to knock out the Sage, which is very vulnerable, and with that knocked out the Bomarc has no homing device, as I understand it, and it would be completely ineffective and completely useless. The remarks of Mr. Chambers conveyed the impression that the Bomarc would be effective by itself in attacking enemy bombers. I think that is a very wrong impression to give.

Mr. CHAMBERS: Mr. Chairman, I did not intend to give any such impression. I would like to say that I think the vulnerability of the Sage is exaggerated by the hon. member in the first place; and, in the second place, it must be realized in the speeds with which we are dealing in this whole matter—not only of the Bomarc interceptors or bombers—Sage, or some similar radar direction device is essential for any interception to take place by any kind of weapon to knock down these bombers. If it were true that your control system got knocked out by the first blow—and I would hope our military planners are not so arranging things—then we would literally have no defence, because none of the items of hardware can work without being directed on to the target.

Mr. WINCH: Do you conceive at all, in the event of aggression—and I am very sorry the names of countries are used, and I hope we are not going to build up a war complex between countries—but, Mr. Chambers, do you conceive there could be any aggression on the North American continent where sub-sonic bombers of an aggressor came before the missile?

Mr. CHAMBERS: I do not think anyone suggested the Bomarc—

Mr. WINCH: If missiles came first, what would be left for defence against sub-sonic bombers?

Mr. CHAMBERS: You have to get this into periods of time, and it is very difficult in a committee like this to have before us the security information that would be necessary to make an assessment of when any potential enemy could attack North America, and ignore his bomber strength.

Mr. WINCH: We have already had from the Minister of National Defence that any strike which is all-out would be a missile attack.

The CHAIRMAN: I am not trying to rush you, but we do have the motion.

Mr. HELLYER: I was wondering whether the parliamentary secretary was appearing as a witness, and whether the statements he is making were on behalf of the government.

The CHAIRMAN: This is the motion moved by Mr. Winch and seconded by Mr. Hellyer:

Mr. Winch moves, seconded by Mr. Hellyer, that the committee recommend that the amount apportioned to the Bomarc in item 225 of the estimates for 1960-61 be reduced by \$7,999,999.

All those in favour?

Mr. HELLYER: Could you give us the reason for reducing it from the figure of \$8 million to \$7,999,999.

The CHAIRMAN: It has been the custom, Mr. Hellyer, as I understand it, for years and years and years; and far be it from me to change it.

Mr. HELLYER: You do not know from what date the precedent was set?

The CHAIRMAN: I do not know whether it was 22 B.C. or not; but for some time, Mr. Hellyer.

Are we ready for the motion?

Motion negatived.

The CHAIRMAN: Gentlemen, we are still on construction of buildings and works.

Are there any further questions on construction of buildings and works? Will the item carry, gentlemen?

Item agreed to.

The CHAIRMAN: Major procurements of equipment. First of all, aircraft and engines, from \$164,817,000, reduced to \$131,698,000. Any questions on aircraft and engines? Will the item carry, gentlemen?

Mr. HELLYER: Mr. Chairman, I would like to ask just a few questions.

The minister indicated to this committee that he recommended that Canada join NORAD in order to integrate more effectively the air defences—

The CHAIRMAN: Could we get down to the question, Mr. Hellyer?

Mr. HELLYER: This is as brief as possible, without being indecent, Mr. Chairman.

The reason for Canada joining NORAD was in order to integrate more effectively the air defence of this country, or, as we have been told, to protect the deterrent, or to act as part of the deterrent, or to protect some miscellaneous part of the territory of the continent. The parliamentary secretary told us today that the Bomarc and the interceptor, if I heard him correctly, are complementary to each other. Was that correct?



Mr. CHAMBERS: I gave it as my view in speaking on the motion.

Mr. HELLYER: I wonder if the minister concurs in this view that the Bomarc and manned interceptor are complementary rather than a substitute for each other?

Hon. G. R. PEARKES, (*Minister of National Defence*): Yes, that is correct.

The CHAIRMAN: Any further questions, Mr. Hellyer?

Mr. HELLYER: Yes, I have a few, Mr. Chairman, if you are not in too big a rush.

The CHAIRMAN: No.

Mr. HELLYER: If that is the case, I wonder if the minister would tell us what Canada's intention is now in respect of the air defence squadrons, and as to whether they will be replaced, in whole or in part; and, if so, when some decision will be announced?

The CHAIRMAN: That is government policy. Do you wish to answer, Mr. Minister?

Mr. PEARKES: I can answer to this extent: No decision has yet been taken to replace the CF-100 in the air defence squadrons of Canada.

Mr. HELLYER: There has been a great deal of speculation in the press to the effect that there is an arrangement pending with the United States government under which Canada would supply a certain quantity of CL44 transport aircraft and obtain, in exchange for those, a certain quantity of American interceptor planes with which we would re-equip part of our air defence squadrons. I wonder if you could give us a progress report on the proposed negotiations?

Mr. PEARKES: I cannot give a progress report, in speculation.

Mr. HELLYER: I wonder if the minister can say whether he has recommended such a proposal to the cabinet?

Mr. PEARKES: I do not report to committees recommendations I have made to the cabinet.

The CHAIRMAN: Mr. Hellyer knows that.

Mr. HELLYER: Could he tell us whether it was recommended to him by the chiefs of staff committee?

Mr. PEARKES: The chiefs of staff make their recommendations to the minister and to the government. Those recommendations are not published.

Mr. HELLYER: Mr. Chairman, I find it difficult to understand the sensitivity, because the Prime Minister, of course, referred to the chiefs of staff decision at the time of the cancellation of the Avro Arrow CF-105; and also at an earlier meeting of this committee the minister quoted from a cabinet minute which, as he well knows, and regretted on consideration, was a direct violation of his cabinet oath.

The CHAIRMAN: We held this type of question out of order at that time, because it is government policy.

Mr. HELLYER: May I return—

The CHAIRMAN: Have you a proper question, Mr. Hellyer?

Mr. HELLYER: I hope they are all proper questions, because they are all important.

The CHAIRMAN: They have all been basically out of order up to this point.

Mr. HELLYER: If they are, then I cannot see any purpose in this committee sitting at all.

The CHAIRMAN: Then would you like to resign from it?



Mr. HELLYER: No; I would like to report back after we get answers to our questions.

The CHAIRMAN: O.K.

Mr. HELLYER: I wonder if the minister could tell us if, in the event the Canadian government does not re-equip part or any of its air defence squadrons, United States interceptors will be allowed to, or encouraged to operate from Canadian bases?

Mr. PEARKES: No agreement has been reached on that point.

Mr. HELLYER: Does the minister think it is advisable? We have been told that there is a theory. Last year, in the House of Commons during the estimates, we went over this theory of defence in depth; first the interceptors, then the Bomarcas, and then the Niki Zeus—no, the Hercules; and the minister agreed with that theory.

If he still agrees with the theory, is he going to recommend, or encourage that the interceptors be placed geographically first so they can operate efficiently, and so the Bomarcas have some semblance of a chance; or is he going to have to upset the apple-cart by having the Bomarcas first and the interceptors second?

Mr. PEARKES: There is no question of upsetting the apple-cart at all.

Mr. HELLYER: The apple-cart is already upset, because the minister only has—as has been stated before—half an air defence policy, which does not jibe with what he states himself, or the evidence that has been given by the commander of NORAD.

The CHAIRMAN: What is your question?

Mr. HELLYER: My question is whether the Canadian government, in agreeing to enter the NORAD agreement, is serious and is going to try to live up to its obligations seriously—or whether it is just a joke?

Mr. PEARKES: The Canadian government has lived up to all agreements which have been made under the NORAD agreement with the United States.

Mr. HELLYER: The Canadian government felt it would be a violation of honour of the United States if the United States did not continue with the production of the Bomarc.

Does the United States feel the same way, in respect to the replacement of the Canadian interceptor squadrons?

Mr. PEARKES: They have never, to my knowledge, expressed any such thought.

Mr. HELLYER: Would it be because of their politeness?

The CHAIRMAN: Just a moment, Mr. Hellyer: you know the minister does not know what the United States feels. That is a foreign government.

Mr. HELLYER: He is in telephone communication with them constantly, and I have a feeling that he does know.

The CHAIRMAN: Let us go ahead to the next question.

Mr. HELLYER: I would like to know whether he is going to recommend that some interceptor, be it Canadian or United States, be the first line of this defence in depth.

Mr. PEARKES: I would be very pleased to tell you what is the decision on any recommendations that I make; but I am not going to tell you what recommendations I am going to make.

The CHAIRMAN: Mr. Hellyer knows that. Are there any further questions, Mr. Hellyer?

Mr. HELLYER: Yes. In respect to the anti-missile, I wonder if the minister could tell us if any progress has been made on it, and whether he thinks there

is a reasonable possibility of a practical air defence in the anti-missile field within the foreseeable future?

The CHAIRMAN: Is there any money in this estimate?

Mr. PEARKES: There is no money in this estimate. We are contributing, through research, to the development of the defence against the missile. We hope that the results of those various tests which are being carried out will eventually prove successful.

The CHAIRMAN: Are there any further questions, Mr. Hellyer?

Mr. HELLYER: I wonder if anyone else has any questions. If not, I would like to start on a new group.

Mr. LAMBERT: I have a question, Mr. Chairman.

The CHAIRMAN: This is on aircraft engines?

Mr. LAMBERT: Yes. With respect to transport aircraft which the minister has listed as being purchased by the Canadian government, and referred to on page 215 of the evidence, could we have a general indication as to when delivery of these is expected. That is the CC106 and the 130B's.

Mr. PEARKES: I will just check and make certain. Some deliveries of the 106 and the 130B are expected during this calendar year.

Mr. HELLYER: Could the minister tell us the cost? I beg your pardon, Mr. Lambert.

Mr. LAMBERT: The greater portion of them will be delivered within this calendar year—or is it expected that they will be delivered by the time the financial exercise is finished?

Mr. PEARKES: What was that?

Mr. LAMBERT: Will they all be delivered by the end of the fiscal year?

Mr. PEARKES: No, I do not think they will all be delivered by the end of the fiscal year; but the deliveries will start certainly in this fiscal year.

The CHAIRMAN: There is \$30 million in this vote, is there not, for the 106—page 215?

Mr. PEARKES: They are all spelled out on page 13.

The CHAIRMAN: Page 215 of the report.

Mr. PEARKES: Page 13 of the little white pamphlet which was issued.

The CHAIRMAN: Is there any further question on that, Mr. Lambert?

Mr. LAMBERT: No.

The CHAIRMAN: Mr. Hellyer?

Mr. HELLYER: Yes. I wonder if the minister could tell us the cost of the C-130B, per aircraft.

Mr. PEARKES: That is on page 13 of the pamphlet.

The CHAIRMAN: Or page 215 of the proceedings and evidence, of the minutes.

Mr. HELLYER: Could you just tell us what it is, to save time?

The CHAIRMAN: Yes. It says:

CC106—long range heavy transport aircraft, at a total cost of \$120 million, of which about \$88 million is already liquidated, with estimated expenditure of \$30 million in 1960-61.

Mr. PEARKES: He is asking about the 130B. The total cost of the 130B is \$14 million, of which \$7 million remains to be liquidated in 1960-61.

Mr. HELLYER: Fourteen million dollars for four aircraft?

Mr. PEARKES: That is right.

Mr. HELLYER: Could the minister tell us if that includes spare parts?

Mr. PEARKES: Yes, that includes spare parts and ground equipment.

Mr. HELLYER: And ground handling equipment.

Mr. WINCH: Mr. Chairman, I have been puzzling for a number of days now as to just where one discussed, as an estimate item, the matter of NORAD. It is obvious, from what you have allowed in the last few minutes, that this is the item where you, on an expenditure basis, discuss NORAD.

The CHAIRMAN: With regard to NORAD, as I see it, there is no—

Mr. WINCH: You have now allowed about 20 minutes.

The CHAIRMAN: —there is no one place, as I understand the estimates, for NORAD.

Mr. WINCH: I know that; but you have allowed the entire question of NORAD, on this item, for the last 20 minutes.

The CHAIRMAN: All right.

Mr. WINCH: I am, therefore, going to choose this point to put forward, very briefly, this; that in all sincerity, and on principle, when the NORAD agreement came before the House of Commons, I voted against it. I have not seen, or heard any reasons, from when I stood in my place in the House of Commons, to change my mind; nor in the 17 or 18 meetings of this committee.

Am I wrong—through you, Mr. Chairman, to the minister—in the assumption that NORAD is basically a Canadian warning system for the United States in the event of aggression on the North American continent? If so, do you still maintain, Mr. Minister, your contention that aggression on the North American continent will be all-out and, therefore, will be of a missile nature?

If I am correct in those assumptions—which I hope I am, Mr. Chairman; basing them on what we have been told by the minister—then NORAD as a defensive system for Canada does not exist as such; it is a warning system for the United States, hoping that they can get off, if any aircraft are left after a missile attack, their strategic air command.

It is that, I will say, my belief—because I am not a military expert—it is my belief, based to a large extent on what the minister has been telling us, that retaliation will not be by strategic air bombers from the United States, or Canada—although we have not them here—but that it will be on a missile retaliatory basis. In other words, I go back and reiterate; it is strictly a warning system for the United States and that, under the agreement—

Mr. CHAMBERS: Is this in order, Mr. Chairman?

Mr. WINCH: —we have given up Canadian sovereignty. That being so,—because I believe it is so—under present circumstances, it is an unnecessary agreement under present provisions and, because I know of no other way to do it, I am going to move that this vote be reduced by the sum of \$1 as a recommendation that the present NORAD agreement be discontinued, and that a new one be arrived at on the basis of warning.

The CHAIRMAN: Gentlemen, do we have a seconder?

Are there any further questions?

Mr. PEARKES: Do you wish me to answer those questions?

The CHAIRMAN: Did you put that in form of a motion, or in the form of questions?

Mr. WINCH: In the form of a motion, but I put three or four questions. I believe the minister got them.

Mr. PEARKES: The first question, I understood, was whether NORAD was only a warning system, and the answer to that is no.

Mr. WINCH: In effect.

Mr. PEARKES: The answer to that is no, because NORAD embraces all the means of defence for the North American continent, and it has army, navy



and air force elements in them. It not only has the warning system, but it has a control system, as well as all the defensive arrangements and protection of the North American continent, which include the SAC bases, and the centres of population.

Mr. WINCH: But not missile aggression?

Mr. PEARKES: Not what?

Mr. WINCH: It is useless against any missile aggression—and did you not say you anticipate it would be a missile attack?

Mr. PEARKES: The equipment that NORAD has at the present time is not effective against the missile attack—and, I say “at the present time”.

Mr. WINCH: Could I ask you this question. Kindly bring me to order if I am repeating too much. Could you conceive of any attack on the North American continent which is not a missile in the initial stage?

Mr. PEARKES: If an attack came on the North American continent within the next few years, it would consist, in the main, of a bomber attack, supported by such missiles as are or will be available to the Russians at that time and, as time goes on, the bombers will not play such a large and important part in the Russian attack, and the missiles will play more and more.

The CHAIRMAN: Gentlemen, I have been fairly lenient on this. You will find most of this evidence in your past minutes.

Mr. WINCH: That is the very reason why I cannot understand the position taken now.

The CHAIRMAN: Could we get back on the items.

Are there any further questions in connection with aircraft engines?

Mr. WINCH: I cannot get a seconder to my motion?

The CHAIRMAN: No.

Mr. WINCH: Well, I am positively amazed, after some of the statements I have heard made in this committee by some of the members.

Mr. HELLYER: You would not be, if you stopped to reflect.

The CHAIRMAN: Gentlemen, let us get on. Have you a question, Mr. Hellyer?

Mr. HELLYER: Yes.

The CHAIRMAN: Well, would you please ask direct questions and not make so many comments.

Mr. HELLYER: You are getting awfully impatient today—

The CHAIRMAN: Well, leave off the statements.

Mr. HELLYER: Could the minister give us an up to date statement as to the progress in respect to the development of the F104?

Mr. PEARKES: I understand it is progressing according to schedule.

The CHAIRMAN: Is there any money in this vote for the 104?

Mr. PEARKES: Yes.

Mr. HELLYER: Is the prototype completed yet, Mr. Minister?

Mr. PEARKES: No, it is not completed yet.

Mr. HELLYER: Well then, in fact, there has still been no F104, G version—the type of aircraft which will be used in re-equipping our forces?

Mr. PEARKES: There are aircraft of a similar type, but the actual model of the CF-104 actually has not been completed yet.

Mr. HELLYER: But, there are very substantial changes between the similar aircraft to which you referred and the one which you expect to obtain.

Mr. PEARKES: Not substantial changes in its ability to fly; certainly not.

Mr. HELLYER: But, quite a few structural changes of various kinds?



The CHAIRMAN: Is that a question, Mr. Hellyer?

Mr. HELLYER: Yes.

Mr. PEARKES: There are some which I would describe as minor structural changes.

Mr. HELLYER: Could the minister give us an estimate as to when he expects the first prototype will be tested?

Mr. CHAMBERS: Mr. Chairman, we are going to have before us DDP, to whose officials these questions would be quite properly put.

The CHAIRMAN: We intend to have them, if we get through with these questions. We intend to go on to the Department of Defence Production next.

Mr. PEARKES: We expect delivery next year.

Mr. HELLYER: Of what?

Mr. PEARKES: The CF-104.

Mr. HELLYER: Of the version that we expect to use to re-equip our air division?

Mr. PEARKES: Yes.

Mr. HELLYER: And this delivery, which we expect next year, will be from Canadair, and produced in Canada?

Mr. PEARKES: Yes.

Mr. HELLYER: Could the minister tell us what engine is being installed in the aircraft?

The CHAIRMAN: I really believe you would get quicker answers from the Department of Defence Production.

Mr. PEARKES: It is a General Electric engine, which has been manufactured by Orenda; it is known by the code numbers J-79 OEL-7.

Mr. HELLYER: Has it the same engine as used on the earlier models?

Mr. PEARKES: I could not say for certain.

Mr. HELLYER: I wonder if you would obtain that information for us, and let us have it at the earliest possible date?

The CHAIRMAN: If not, we can get it from the Department of Defence Production.

Mr. HELLYER: The cost of this aircraft has been given to us in round figures; could you give us an up to date estimate of the cost?

Mr. PEARKES: There was \$75 million in this year's estimates for the 104.

Mr. HELLYER: What I am more interested in is the total over-all estimate of the cost of the program.

Mr. PEARKES: If you will look under paragraph 7 of the paper that was issued, you will see, with regard to production of the CF-104 aircraft, that \$27 million was expended to the end of the last fiscal year, and expenditures of \$75 million are estimated for 1960-61, for which provision has been made in the estimates.

The CHAIRMAN: That is to be found at page 214.

Mr. HELLYER: What will be the complete cost of the 214 aircraft?

Mr. PEARKES: The estimated cost for the 214 aircraft is \$420 million. That is the total cost.

Mr. HELLYER: Does that include all government-supplied equipment?

Mr. PEARKES: That is correct.

Mr. HELLYER: Does it include spare parts to the extent ordinarily required, say one-third of the original cost?

Mr. PEARKES: Yes, that includes the normal spare parts.

Mr. WINCH: How soon do you anticipate, after delivery, they will be declared obsolete?

The CHAIRMAN: That is one of those questions.  
Are there any further questions?

Mr. PEARKES: The life and usefulness of the 104 is expected to last over a number of years.

Mr. WINCH: That was not a facetious question but, in view of all we have been told about the changing types of potential or possible wars, I am very much concerned with the expenditure of \$400 million on an aircraft which, from all I have been able to hear from the only expert we have heard, Major General Pearkes, cannot serve a useful purpose.

Mr. PEARKES: Cannot serve a useful purpose?

Mr. WINCH: In the next few years, as you see it in the type of potential war.

Mr. PEARKES: Very definitely.

Mr. WINCH: What would this plane intercept?

Mr. PEARKES: They are a reconnaissance or strike aircraft and they have a very important role to play.

Mr. WINCH: I do wish, in view of the repeated statement of the minister that there is only one answer to a possible war, and that is a deterrent striking force back on missiles, that we had a different policy.

Mr. HELLYER: Does the \$400 million include ground handling equipment?

Mr. PEARKES: Yes.

Mr. HELLYER: I hope the minister's estimates will be borne out by eventualities. I would like to go on record by saying I doubt very much if they can.

The CHAIRMAN: All right, Mr. Hellyer. Have you any question? You doubt it will. Have you any further questions on aircraft?

Mr. HELLYER: Yes, Mr. Chairman. I wonder if the minister has, since letting the contract for this, investigated the possibility of buying off the shelf this aircraft or any other aircraft to do the same job, and if so what the comparable cost would be.

Mr. PEARKES: A very thorough examination was made of the individual types of aircraft with which to rearm the air division and, after examining the many different types, the decision was made both on the ground of efficiency and the ground of standardization with other NATO countries and in regard to the economics of defense and production, that this CF-104 would be selected.

Mr. HELLYER: Could the minister tell us when the decision was taken by the Canadian government to go into this new role which is a tactical role and could be interpreted as being part of the offensive retaliatory capability.

Mr. PEARKES: The final decision was made last year.

Mr. HELLYER: Just shortly before the announcement of the intention to acquire the aircraft.

Mr. PEARKES: Yes. It is a policy of the government to make government policy known to the house just as soon as practicable after the decision is made.

Mr. HELLYER: The minister did not make clear at the time of the announcement that these aircraft were being equipped with the capability of carrying

atomic bombs. Does he not think the government should have provided an opportunity for a full debate on such a radical change in Canadian policy before it was effective.

Mr. PEARKES: There was every opportunity to discuss this matter in the house. It was well known then that the CF-104 would have weapons which would have or could have a nuclear capability.

Mr. HELLYER: The minister said it is well known. Can he state any evidence prior to his announcement of the matter that the CF-104 would be used in a bomb carrying role.

Mr. PEARKES: I do not know that I can produce any evidence to that effect. You were well aware of it.

Mr. HELLYER: Could the minister state why he feels it is advisable to proceed with commitments involving an expenditure of \$400 million or \$500 million before Canadian government policy in respect of the use of atomic weapons is clarified.

Mr. PEARKES: Canadian policy in connection with the use of atomic weapons has been made perfectly clear by the Prime Minister in the house even in recent months.

The CHAIRMAN: Are there any further questions?

Mr. HELLYER: Some persons of average intelligence have read it and confided to me that they still are not too clear on it.

The CHAIRMAN: What is your question?

Mr. PEARKES: The question is, has he average intelligence. I would not like to answer that one.

The CHAIRMAN: Could we get on.

Mr. HELLYER: Yes. Will the Canadian government have a say as to whether atomic weapons carried by the CF-104 can be used or will this be a power and authority held in the control of others?

The CHAIRMAN: This has been answered about fifteen times. Do you wish to answer once again, Mr. Minister?

Mr. PEARKES: They would be used if and when they are required and made available in accordance with NATO policy.

Mr. HELLYER: Would it be true, as one United States spokesman indicated, that even though the bombs were carried in Canadian aircraft they would be subject to some device whereby they could only be made potent on orders, or through the control, of United States forces?

Mr. PEARKES: Those details in connection with the use or storage of these weapons in Europe depend upon a note which has not yet been completed.

Mr. HELLYER: A note which has not yet been completed. How long have negotiations been carried on?

Mr. PEARKES: Discussions have been going on, off and on, for some time between the officials of the Department of National Defence and the defence department of the United States.

Mr. WINCH: The minister said the note has not been completed.

Mr. PEARKES: No note has been completed nor has a draft note been prepared.

Mr. WINCH: It is not yet in the hands of the Department of External Affairs?

Mr. PEARKES: It is not yet in the hands of the Department of External Affairs. That is, a note is not yet in their hands—a written note.

Mr. HELLYER: Probably use and control of weapons for the CF-104 would involve NATO as well as just Canada.



Mr. PEARKES: NATO naturally would be involved.

Mr. HELLYER: But no notes have been exchanged as to the actual mechanics.

Mr. PEARKES: I beg your pardon.

Mr. HELLYER: You just said no notes have been exchanged.

Mr. PEARKES: No note has yet been exchanged.

Mr. HELLYER: Has the government asked the permission of the French government to operate Canadian interceptors from French bases after they have been equipped with nuclear weapons?

Mr. PEARKES: No such arrangement is made.

Mr. HELLYER: Are negotiations being carried on?

The CHAIRMAN: We are getting out of the line of questioning.

Mr. HELLYER: Let us be reasonable. You cannot ask us to spend \$400 million and not know whether the planes can be operated.

Mr. WINCH: I wanted to reduce it by one buck and you would not support me.

The CHAIRMAN: What is the question?

Mr. HELLYER: Are negotiations being carried on for permission to use these bases?

Mr. PEARKES: If you mean by an exchange of notes, no.

Mr. HELLYER: Do you mean by negotiations?

Mr. PEARKES: My interpretation of negotiations is discussions which have taken place—and some discussions have taken place—searching for information between Canadian military authorities and the authorities at SHAPE. Now these aircraft—and this air division—are under the command of SHAPE. They and the supreme allied commander would make recommendations as to the location of the aircraft if he wished, or if it was necessary, for him to make any changes. You should remember at the present time there are two wings in Germany and two wings of the air division in France.

Mr. HELLYER: Is the minister saying there have been no direct negotiations between the Canadian government and the French government in respect of this matter?

Mr. PEARKES: There have been no direct negotiations of which I know between the Canadian government and the French government regarding this matter.

Mr. HELLYER: Any negotiations which might have been carried on have been carried on by the supreme allied powers in Europe on behalf of Canada?

Mr. PEARKES: I do not know of any negotiations which have been carried on on behalf of Canada by the supreme allied commander.

Mr. WINCH: Would the minister indicate what he expects, or what is hoped, or what his hope is in connection with these squadrons? Does he hope that they will be diversified over the four bases as at present, or over more than that? Would he be happy if they had to be concentrated on two bases?

The CHAIRMAN: Can you look into the future?

Mr. PEARKES: There have been no firm plans made yet as to any re-allocation which might be necessary of these squadrons.

Mr. HELLYER: Does the minister not feel it is necessary to make long-range plans about the use of weapons before he spends \$500 million?

Mr. PEARKES: I am quite satisfied that adequate plans could be made to meet this situation.

Mr. HELLYER: Can you give us any reason for your optimism?

Mr. PEARKES: Yes. I have confidence in the supreme allied commander.

Mr. HELLYER: I think we all have; but he has some real problems too, notwithstanding some of the 15 members.

The CHAIRMAN: What is your question?

Mr. HELLYER: Does the minister think it would be militarily sound to base all the F-104 squadrons on two bases?

Mr. PEARKES: I do not think there would be any indication of permanently basing the squadrons—all squadrons of CF-104's on two bases.

Mr. WINCH: What is the approximate range of the CF-104?

Mr. PEARKES: It is in the neighbourhood of 500 miles.

The CHAIRMAN: Are there any further questions on this item of aircraft and engines, or shall it carry?

Mr. WINCH: I am not asking for a definite answer, but you said approximately the range of the CF-104 is 500 miles.

Mr. PEARKES: Yes.

Mr. WINCH: And it is a reconnaissance and interceptor plane?

Mr. PEARKES: Not an interceptor; it is a strike-reconnaissance aircraft. It is primarily to be used against ground targets; and if the Russians start to invade western Europe, then these aircraft would be important against ground targets. You might have centres of supply, or strategic centres, where communications were concentrated, or you might have special targets such as long columns of tanks, or something like that.

Mr. WINCH: Is it subsonic?

Mr. PEARKES: It is exactly mach II; it has twice the speed of sound.

Mr. WINCH: My point is this: what I was trying to get at was this: does this CF-104, on which we are to spend \$400 million, have a range of 500 miles?

The CHAIRMAN: No, it has a radius.

Mr. WINCH: Well, if it has a radius of 500 miles, where does it differentiate to the extent that it would cancel the CF-105? Where is the differentiation there?

Mr. PEARKES: It is an entirely different weapon. The CF-105 was an interceptor.

Mr. WINCH: An interceptor, and strictly an interceptor?

Mr. PEARKES: To intercept enemy bombers; while the CF-104 is, as I have said, a strike-reconnaissance aircraft, one which is to be used for reconnaissance purposes, and one which is to be used against ground targets. It is not an air defence weapon, with the idea of attacking enemy bombers, and it would not come into use until the enemy was actually on the move.

Mr. WINCH: You say it would only come into use if there were ground forces on the move; otherwise it would not be used?

Mr. PEARKES: That is right.

Mr. WINCH: Only against ground forces.

Mr. PEARKES: That is right; and it might be used against supply or ammunition depots, or it might be used against air fields from which interceptors were taking off.

Mr. WINCH: What we have now is \$75 million in the estimates here, with an ultimate cost of \$400 million, for an instrument—if I may use that term—for use in a conventional war.

Mr. PEARKES: No.

Mr. WINCH: If it is for use against ground forces, is that not a conventional war?

Mr. PEARKES: Not if those ground forces have the capability of using nuclear weapons.

Mr. WINCH: Then why would these planes be more suitable than missiles in the role for which they would be engaged?

Mr. PEARKES: They are considered to have more flexibility, and therefore capable of engaging more targets, upon opportunity.

Mr. CHAMBERS: Are there any reconnaissance missiles yet?

Mr. HELLYER: This has about the same advantage that you would have with Bomarc missiles.

Mr. PEARKES: I have said that the Bomarc missile does not replace interceptors, they are rather, supplementary, one to the other.

Mr. WINCH: Would these planes have to be on a ten to fifteen minute alert, to keep them from being too vulnerable to enemy missiles?

Mr. PEARKES: That would be a decision for the commander to take.

The CHAIRMAN: Are there any further questions on aircraft and engines? Item agreed to.

Mechanical equipment, including transport, from \$2,928,000 down to \$2,400,000, a reduction of \$500,000. May the item carry, or are there any questions?

Mr. HELLYER: I would like to know what is involved there.

The CHAIRMAN: By all means. Would you like to know why the reduction?

Mr. HELLYER: What are we buying for that money.

The CHAIRMAN: All right, let us have a breakdown.

Mr. PEARKES: Cargo and personnel vehicles, \$940,000; road and runway maintenance, \$1,174,000; and there are various other items including warehousing and handling of equipment; that is in the big supply depots, \$213,000.

Mr. WINCH: Would that include maintenance of the Alaska highway, and the bridge which you opened yesterday?

Mr. PEARKES: No. That is included under the army. This has nothing to do with maintenance. This is for the purchase of equipment, and when I said road and runway maintenance, I meant it was for the purchase of equipment for that purpose.

Mr. WINCH: I was wondering if you were including the Alaska highway.

The CHAIRMAN: It is for the purchase of equipment for use. Are there any further questions?

Agreed to.

Armament equipment; there is quite a reduction; are there any questions?

Mr. HELLYER: What does it include?

The CHAIRMAN: The \$275,000?

Mr. HELLYER: All right. What does it not include?

The CHAIRMAN: You want to know what it includes this year, and the reason for the reduction?

Mr. PEARKES: In previous years—I mean last year—there was \$25,000 for ground armament, but we are not including any ground armament this year because we have all we considered is essential.

Now, there is certain rocket-firing and sighting equipment which is up to \$212,000, but which is a reduction of \$300,000.

Mr. HELLYER: I am sorry, I did not catch that, Mr. Minister.

Mr. PEARKES: There is a reduction of \$300,000.



Mr. HELLYER: And what type of equipment is this?

Mr. PEARKES: I said it covered rocket firing, sighting and armament equipment for the maritime command. That is equipment to go into the Argus aircraft. There is some testing equipment included here. Those are the main items.

The CHAIRMAN: Are there any further questions, gentlemen?

Mr. HELLYER: Yes, in respect of some of the items this does not include in the event that the minister should decide, or that someone else should decide for him, not to re-equip any of the air defence squadrons, would the minister consider improving the armament of the CF-100's, or does he consider that would not be advisable?

Mr. PEARKES: No, it is not considered that it would be advisable to rearm the CF-100.

Mr. HELLYER: Is that because they are so hopelessly out of date that nothing can be done?

Mr. PEARKES: They are not hopelessly out of date. They are still operational at the present time. They will very soon—in another year or two—cease to be operational and they will be phased out. We do not consider it is worthwhile to re-equip them.

Mr. HELLYER: I think the minister is aware that even in 1956 plans were under way for a later Mark, which would have an improved fire power capacity. He himself is on record in *Hansard* as having said, back at that time, that the plane was obsolete.

The CHAIRMAN: What is your question, Mr. Hellyer?

Mr. HELLYER: Has the minister modified his opinion since, and does he feel now that an improvement—

Mr. PEARKES: The only objection I took was to the adjective "hopelessly".

Mr. HELLYER: It is obsolete but not hopelessly so?

The CHAIRMAN: Are there any further questions, Mr. Hellyer?

Mr. HELLYER: Yes I think the minister would agree then that the armament of these air defence squadrons is inadequate, if not today, certainly at any time in the future to do the job that it is required to do.

The CHAIRMAN: Are there any other questions, Mr. Hellyer?

Mr. HELLYER: Yes, is there any provision given, or being given for air to underwater missiles to be carried by the maritime reconnaissance squadrons?

Mr. PEARKES: Yes, we have torpedoes which are carried by aircraft and can be released from aircraft to travel underwater to a target. They have a homing device on them.

Mr. WINCH: They have a homing device on them?

Mr. PEARKES: They have a homing device on them.

Mr. HELLYER: Are there any improvements in sight in this field, or any new equipment being considered which is capable of not only going underwater, but going to sufficient depths to deal with modern submarines? I use the word "modern" advisedly so it will suit the minister.

Mr. PEARKES: There are a number of experiments continuing, and the underwater strikeability is being increased.

The CHAIRMAN: Are there any other further questions in regard to this \$275,000 item?

Mr. HELLYER: Is there any money included in this year's estimates for any of that equipment?

Mr. PEARKES: No, not in this item. That would be included under re-research and development.

The CHAIRMAN: May the \$275,000 item carry?

Mr. HELLYER: Before we leave that, Mr. Chairman.

The CHAIRMAN: I am sorry, Mr. Hellyer.

Mr. HELLYER: Perhaps, in respect to the four other interceptor squadrons overseas, the minister could tell us now what he is going to do with them, and if he intends to increase the armament that they carry?

Mr. PEARKES: What did you refer to?

Mr. HELLYER: I was referring to the four additional overseas squadrons of CF-100's.

Mr. PEARKES: There are no plans made for rearming those.

Mr. HELLYER: Is the matter of possible replacement of those aircraft under consideration?

Mr. PEARKES: Not at the present time.

Mr. HELLYER: Can the minister give the committee any indication of how long he thinks they would be of any usefulness in their present role, if they are not replaced?

Mr. PEARKES: I would say their present role would cease in about two years time or so.

The CHAIRMAN: May the item carry, gentlemen?

Some hon. MEMBERS: Agreed.

The CHAIRMAN: The next item we are considering is electronic and communication equipment. There is an increase from \$17 million to \$28 million. Are there any questions in this regard, gentlemen?

Mr. WINCH: Is that increase in respect of existing aircraft, or new aircraft?

Mr. PEARKES: No, this is in regard to communications.

Mr. WINCH: This is strictly in respect of communications? This item would have nothing to do with the radar lines at all then?

Mr. PEARKES: Oh, yes, it has.

Mr. WINCH: It does have to do with radar lines?

Mr. PEARKES: This item deals with both ground and air communications. One of the major items would be, I think, in respect of equipment connected with BMEWS facilities, which is providing improvements for the early warning systems, including missile warning stations in Alaska and Greenland.

The CHAIRMAN: Are there any further questions, gentlemen?

Mr. WINCH: You say this is in respect of Alaska, and did you say Greenland and Bermuda?

Mr. PEARKES: No, I said in respect of BMEWS. Perhaps I am not quite right there because eventually that equipment will be paid for by the United States, but this item is in respect of improvements of ground control communications, and a general improvement in communications. It also has to do with the Pine Tree communication line.

Mr. HELLYER: Does this include improvements to SAGE?

Mr. PEARKES: I do not think this includes improvements to SAGE. This is actually in respect of the buying of equipment which will be required for improving the control system on the Pine Tree line.

Mr. WINCH: Under the present situation the Pine Tree line is not now obsolete?

Mr. PEARKES: No, by no means.

Mr. WINCH: Would this be an improvement?

Mr. PEARKES: There is no reason why it should not be improved.

Mr. WINCH: What would the improvement in respect of the Pine Tree line be, having regard to the expenditure which is outlined here? Will these improvements double the range, making it reach higher up or further out?

The CHAIRMAN: This is in respect of equipment only.

Mr. WINCH: But if you have the equipment you must use it.

Mr. PEARKES: One of the items of equipment is in respect of communications between the Pine Tree line and the other defence command station at St. Hubert, linking up with the NORAD centres.

Mr. WINCH: All the radar lines are completely connected through NORAD now. They must be.

Mr. PEARKES: All radar lines are what?

Mr. WINCH: All radar lines in Canada are now connected with NORAD?

Mr. PEARKES: That is right.

Mr. WINCH: So this is basically to tie in this new system in Greenland?

Mr. PEARKES: This has to do with improvements in equipment.

The radar improvement program amounted to \$1,006,000—Airborne Doppler equipment. Those are navigation aids in aircraft; \$1,954,000. Then there is the TACAN equipment.

Mr. HELLYER: What was the last?

Mr. PEARKES: T-A-C-A-N—Tacan. It is a navigation aid, \$5,500,000. That is for all aircraft navigation.

Mr. WINCH: It is going into all the aircraft? I understood our aircraft were obsolete. Is that going into the Argos, the Albatross?

Mr. PEARKES: Into all the R.C.A.F. aircraft, aircraft of all types. It is continental-wide, and is also a NATO form of navigational aid.

Mr. WINCH: Could I ask where it is manufactured?

Mr. PEARKES: It is made here in Canada, I am informed.

The CHAIRMAN: Any further questions, gentlemen? May the item carry? Agreed to.

Mr. HELLYER: I have a question there. Is there anything included in the communications expenditures which is a joint operation with the United States?

Mr. PEARKES: There is nothing in this vote.

The CHAIRMAN: Not in this year's total.

Special training equipment. That is just about the same as last year, gentlemen—\$2,740,000. Any questions?

Mr. HELLYER: Does this include any flight simulators?

Mr. PEARKES: Yes, air crew trainers, \$1,194,000.

Mr. HELLYER: Could the minister tell us for what aircraft?

Mr. PEARKES: Simulators for the 109 and the 106, air transport command, and the SA-16B, which is the search and rescue aircraft. Simulators for all three aircraft.

Mr. HELLYER: You have one for the 109 and the 106. What about the 130B?

Mr. PEARKES: No.

Mr. HELLYER: Not for it. There was one question I should have asked earlier, and I wonder if you would allow me the indulgence, Mr. Chairman?

The CHAIRMAN: By all means, ask it now.



Mr. HELLYER: That is with respect to the 130B. I wonder if the minister will tell us precisely what it will do which neither one of the other two air transport aircraft will do?

Mr. PEARKES: It moves much heavier equipment. It is a much bigger aircraft than the 109, and it has the short take-off ability.

Mr. HELLYER: It is much bigger than the 106?

Mr. PEARKES: It is bigger than the 109, and will take a heavier load. It is low on the ground, so that it is easy for loading heavy vehicles.

Mr. HELLYER: It has special loading characteristics?

Mr. PEARKES: Yes, it has special loading characteristics. The ramp is low down and it is an end-loading aircraft.

Mr. HELLYER: Do you use rocket-boosted take-off in that aircraft?

Mr. PEARKES: No, not normally.

Mr. HELLYER: Thank you.

The CHAIRMAN: Special training equipment. Carried, gentlemen?  
Agreed to.

The CHAIRMAN: Miscellaneous technical equipment, \$4,500,000. Any questions? Does the item carry?

Item agreed to.

The CHAIRMAN: Ammunition and bombs, \$6,600,000, a reduction from \$15,603,000.

Mr. WINCH: May I ask the minister, through you, Mr. Chairman, if he can now give a message to the world that this reduction by one-half means that he does not contemplate any hostilities in the coming year?

Mr. PEARKES: I do not think it would be fair to say that this reduction is based purely on the fact that we do not expect hostilities. We certainly hope there will be no hostilities, but there has been a considerable build-up in the past, and we are now able to decrease the amount of money which has to be spent on bombs and torpedoes, etc. That is due, in the main, to the wind-up of the Sparrow charges.

Mr. WINCH: I am not opposing it: I am happy to see it; and I wish you would cut it down some more.

Mr. PEARKES: That is not possible at this time.

Mr. HELLYER: Would it be fair to say that because so many of our weapons are obsolete or are so near obsolete, that we do not wish to buy more ammunition for them?

Mr. PEARKES: Nobody can say that the torpedoes which we are getting and which the United Kingdom are buying from us can be considered obsolete, in any way.

Mr. HELLYER: That would be true of some of our small arms for aircraft and some of the unguided rockets, would it not?

Mr. PEARKES: No.

The CHAIRMAN: Any further questions?  
Agreed to.

Mr. CARTER: I am not on this particular item, but I am on the total.

The CHAIRMAN: On the which?

Mr. CARTER: On the total of the various items, \$231 million, as against \$264 million for last year. There is a total reduction in the R.C.A.F. of \$33 million; for the army there was a similar reduction of \$20 million; which round figures, for the Royal Canadian Navy a reduction of \$20 million; which makes a total reduction in equipment, in round figures, of \$73 million as compared to last year.

The question I want to ask the minister is: Have these reductions been recommended by the military experts?

Mr. PEARKES: As I have said before, the decision as to what reductions or increases are made is my responsibility. I receive advice from the military authorities and weighing up their advice and judging the money that is available, a decision as to how it is spent is mine. I receive advice, and it is not customary to state what recommendations are received. It is not fair to the chiefs of staff to be continually stating their recommendations.

The CHAIRMAN: That was explained before.

Mr. HELLYER: Have any reductions been recommended to you by treasury board?

The CHAIRMAN: That would be—

Mr. CHAMBERS: That is classified.

Mr. HELLYER: If it is an unfair question, I withdraw it.

The CHAIRMAN: That vote was No. 225. May the entire vote carry? Agreed to.

The CHAIRMAN: Is it your wish to break off now, because we are now going on to Defence Research and Development.

Mr. WINCH: I asked a week and a half ago for a breakdown of the defence research and development by major provisions included in these estimates. Is that here now?

Mr. PEARKES: We have a breakdown here which I think will give you the information you requested.

Mr. WINCH: I wonder whether we could have it this afternoon, so that we might study it?

Mr. PEARKES: Do you want me to read it out?

The CHAIRMAN: We will table it and include it as an appendix later. There is no reason why you cannot have a copy today, Mr. Winch.

Mr. WINCH: Yes, if I could have a copy before the next meeting.

The CHAIRMAN: We will break off until Wednesday at 3.30, at which time we will start on Vote 226, defence research and development.

Mr. PEARKES: Perhaps it would be a good idea to hand these answers around now.

The CHAIRMAN: We will hand them around to every member.

—The Committee adjourned.

ORDER OF REFERENCE

HOUSE OF COMMONS

TUESDAY, July 12, 1960

*Ordered*,—That the names of Messrs. MacInnis and Rogers be substituted for those of Messrs. Macdonald (*Kings*) and Baldwin respectively on the Special Committee on Defence Expenditures.

Attest

L.-J. RAYMOND,  
*Clerk of the House.*





## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

WEDNESDAY, July 13, 1960.

(23)

The Special Committee on Defence Expenditures met at 3.30 o'clock p.m. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Chambers, Forgie, Halpenny, Hellyer, Lambert, MacInnis, Morton, Parizeau, Roberge, Rogers, Spencer, Webster and Winch.—13.

*In attendance:* Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. B. Armstrong, Assistant Deputy Minister (Finance); of the *Defence Research Board*: Dr. H. M. Barrett, Chief of Establishments; Mr. G. W. Dunn, Chief of Administration and Mr. R. G. Hunt, Head, Finance Section; and Mr. D. B. Dwyer, Superintendent, Parliamentary Returns, Department of National Defence.

The Committee resumed its consideration of the 1960-61 Estimates of the Department of National Defence.

It was moved by Mr. Spencer, seconded by Mr. Parizeau, that the matter of calling outside witnesses be again referred to the Steering Committee with instructions to report with reasonable despatch.

Thereupon, Mr. Hellyer proposed in amendment to the said motion that the final words "with reasonable despatch" be deleted and the words "to the next meeting of the Committee" be substituted therefor. Following debate Mr. Hellyer's proposed amendment was defeated on division: Yeas, 3; Nays, 7. The main motion, being put, was carried.

On items 226, 227 and 228 concerning Defence Research and Development, Messrs. Pearkes, Armstrong and Barrett were questioned at length.

A document which had been distributed to members present at the last meeting was then considered. The said document was entitled Defence Research Board, Estimates 1960-61—\$23,952,000; Summary of Operations and Maintenance by Headquarters and Stations and of the Nature of the Research involved. The Committee agreed that the said document, which related to Item 226 of the Estimates be printed as an Appendix to this day's proceedings. (*See Appendix "A" hereto*).

Items 226, 227 and 228 were approved.

It was agreed that further consideration of the Estimates of the Department of National Defence stand, and that at its next meeting the Committee consider the Estimates of the Department of Defence Production.

At 5.10 o'clock p.m. the Committee adjourned until 9.30 o'clock a.m. on Thursday, July 14, 1960.

Eric H. Jones,  
*Acting Clerk of the Committee.*





## EVIDENCE

WEDNESDAY, July 13, 1960.

3:30 p.m.

The CHAIRMAN: Gentlemen, we have a quorum; thank you. The minister has just got back from the meetings he has been having with United States representatives on defence.

Would you turn, gentlemen, to page 322 of your estimates, under Defence Research and Development, and carry on to page 323, about the center of the page, the item reading, Acquisition of Equipment, etc., with a total of \$6,528,245.

This is made up of two votes, 226 and 227; so we can consider those two votes at the same time.

### DEFENCE RESEARCH AND DEVELOPMENT

Item 226 Defence Research Board—Operation and Maintenance .....	\$23,952,119
Item 227 Construction or Acquisition of Buildings, Works, Land and Equipment .....	6,528,245
	<hr/> \$30,480,364

Mr. HELLYER: Mr. Chairman, before we proceed to the discussion of these votes and the details of the defence estimates, I wonder if this would not be an appropriate time to discuss in the committee itself the possibility of calling outside witnesses.

We have practically finished now the routine examination of these expenditures, and will soon be coming to the end of our deliberations in this committee. This matter was mentioned at the last meeting of the committee, and it was your opinion then that a steering committee meeting would be held to consider the matter.

The CHAIRMAN: I still think it should.

Mr. HELLYER: I know that you have been very busy this week, as we all have, with the insuperable burdens that have been placed upon us; but I think, in view of the lateness of the hour, it would be advisable to discuss it in the committee by the various members of the committee so that individual opinions as to whether or not outside witnesses should be called may be ascertained.

At the outset it was stated, and widely held in the press, that we would have every opportunity for full and complete discussion—and I think that was the wish of everyone. We have now had the minister with us for a large number of meetings, and I must say that he has been a very good witness; he has been very patient, and we have enjoyed having him with us.

There are questions that have arisen, however, and I think it is only right and proper that this committee should consider the advisability of hearing others in respect to these matters. The minister has told us, for instance, that our destroyer escorts can catch submarines; but there is some question as to submarines, of what vintage; and a very serious question arises as to whether we should be, at this stage, embarking upon the construction of further destroyer escorts when it is felt by some, and stated by some, that they will not be fast enough to catch submarines of contemporary vintage.

The CHAIRMAN: Would you get back to the witnesses, Mr. Hellyer?

Mr. HELLYER: And similarly, in respect to other matters, Mr. Chairman, there is the matter of our obsolete CF-100's, as to whether or not they are effective, and whether or not they could catch potential enemy bombers—which is denied by some.

Also, there is the question in respect to our army overseas. We have been told that it requires mobility, and we are at the same time told that a number of vehicles necessary to give it maximum mobility are not included in the estimates; and in some cases there is no requirement for them.

Under these circumstances, Mr. Chairman, it would seem advisable, if not absolutely necessary, that we should consult others so that we have the advantage of the full spectrum of opinion and expert advice on these matters, in order that we can judge them on their merits.

The CHAIRMAN: Mr. Hellyer, you were one of the steering committee of five when we decided, at that time—at the beginning of these sessions—that we would reconsider that, as we went along—as we were drawing towards a close—after seeing how much time we had.

I still feel the same as we felt then. I think it is a matter for the steering committee to toss around once again and bring its recommendations to the committee. Is that your understanding, Mr. Chambers? No, you were not on the steering committee; I am sorry.

Mr. CHAMBERS: No.

Mr. HELLYER: I think that is more or less correct, Mr. Chairman; but the time has almost expired. I am sure the minister himself would want us to have other witnesses before us so that we could have the benefit of their experience, opinion and advice. I would like to hear him on that matter, and I would like to hear members of the committee, as individuals, express their opinions.

The CHAIRMAN: We did make up our minds once on that, and I do not see that you, one member of the steering committee, should change the steering committee's thinking on it. I would suggest that we hold a steering committee meeting tomorrow, if necessary, and consider it at that time. A recommendation could then be brought back to this committee.

Mr. HELLYER: You made this same suggestion at the last meeting, Mr. Chairman, and time is running out.

The CHAIRMAN: Well, I still believe it.

Mr. HELLYER: You, unfortunately, with respect, have been too busy to call one, and that is the reason I felt it should be raised in the committee as a whole at this time.

Mr. WEBSTER: Mr. Chairman, may I make a suggestion? If the steering committee cannot agree amongst themselves, this is certainly not the place to "rattle it out". Let us get on with the work we have to do, consideration of the estimates, and let Mr. Hellyer and the rest of the steering committee fight it out.

Mr. HELLYER: Mr. Chairman, the gentleman who has just spoken is obviously not familiar with the rules of this committee and the house; that is, that the recommendations of the steering committee have to be considered by the committee as a whole. There is no reason why a decision could not be taken here without the advice of the steering committee.

The CHAIRMAN: Except that you are going against the original decision of the steering committee.

Mr. HELLYER: Not at all.

The CHAIRMAN: And I do not see why you should do that, without the other members of the steering committee.

Mr. HELLYER: Not at all. It was merely decided that it would be postponed until we considered item 1.

The CHAIRMAN: That is right. We are not there yet.

Mr. CHAMBERS: Mr. Chairman, I wonder if, in order to get over this—it is a question of time—the committee could instruct the steering committee to bring back a recommendation at the next meeting on this subject?

The CHAIRMAN: By all means. There is only one trouble. Our next meeting is tomorrow morning, and I do not think it would be fair to your steering committee to instruct it to bring back a recommendation at the next meeting, which is tomorrow morning at 9:30.

Mr. HELLYER: Mr. Chairman, I have more confidence in the steering committee than you have, even though mine is pretty slim. But I cannot see any reason why the steering committee, with the Chairman it has, could not meet tonight and bring back a decision tomorrow.

The CHAIRMAN: Perhaps it could, if we had Mr. Winch. I would not want to meet without Mr. Winch, because he has been a very valuable member of the steering committee, and it would not be fair to meet without him.

Mr. MACINNIS: Mr. Chairman, may I say something here?

The CHAIRMAN: Certainly, Mr. MacInnis, and welcome to the committee.

Mr. MACINNIS: This is my first meeting of the committee. Mr. Hellyer is talking about bringing in expert advisers from outside, to discuss their opinions, and so that they can be compared with the advice this committee has already received from the department. I just wonder what experience Mr. Hellyer is calling upon to decide whatever differences of opinion there are.

The CHAIRMAN: I do not want to get into a discussion on this now. Is it the wish of the committee that we refer this matter to the steering committee—as was the original thinking? I wonder if that is still your wish. I can call a meeting tonight, if necessary, if Mr. Winch is in town. I do not know whether or not he will be. If not, it can be called for another time.

Mr. MACINNIS: I am just saying that, Mr. Chairman, because Mr. Hellyer is throwing his experience at the committee.

Mr. SPENCER: I would so move, Mr. Chairman: that the matter be referred to the steering committee.

The CHAIRMAN: Do we have a seconder?

Mr. PARIZEAU: I second that.

Mr. ROBERGE: Mr. Chairman, is it not the fact that when the steering committee is considering some matters it is considering the matters that were referred to it by this committee—by the full committee?

If we are not allowed to discuss that now, it is impossible for us to suggest names to the steering committee so that they can invite them as witnesses before us here.

The CHAIRMAN: Mr. Roberge, if you go back in your minutes you will notice that I asked each member to submit names to the steering committee some time ago.

Mr. HELLYER: Mr. Chairman, I wonder if you could tell us whether you have received any names—and if so, when, approximately?

The CHAIRMAN: Yes, we received some names. I am not too sure now exactly who they were; but some of the committee members did respond to that request.

Mr. SPENCER: Question!

The CHAIRMAN: Is there any further comment on the motion, gentlemen? The motion is that the matter of calling outside witnesses be again referred to the steering committee. Moved by Mr. Spencer; seconded by Mr. Parizeau.



Mr. HELLYER: Was that with instructions to report back at the next meeting?

The CHAIRMAN: With instructions to report back, period.

Mr. HELLYER: I thought it was to report back at the next meeting.

The CHAIRMAN: What is your motion, Mr. Spencer?

Mr. SPENCER: Report back.

The CHAIRMAN: With instructions to report back. Is there any further comment? Are you ready for the question?

Mr. SPENCER: May I add, Mr. Chairman—with reasonable despatch.

The CHAIRMAN: Yes. "with reasonable despatch" if that is agreeable to everybody, and your seconder.

Mr. HELLYER: Mr. Chairman, I would like a definition of that, for the record. Before the motion is put, I wonder if you can explain why we are meeting tomorrow morning instead of Friday morning as usual.

The CHAIRMAN: Just to try and get through: I am getting a little tired of it.

Mr. HELLYER: Then would we have another one on Friday?

The CHAIRMAN: We have another one on Friday, at 9:30.

Mr. HELLYER: This is an extra meeting which is being inserted; is that the idea?

The CHAIRMAN: That is right. Are you ready for the question, gentlemen? All in favour?

Mr. HELLYER: Mr. Chairman, before the motion is put, I think it should be amended to read, "to report to the next meeting of the committee".

The CHAIRMAN: As I say, the chair would rather have the motion as is, for the simple reason that I do not know where Mr. Winch is at the present time. I do not know whether he is available for tonight, and I do not think it would be fair—even though this is a non-political group; I realize that—to have a meeting of the steering committee without at least one member from each of the parties. . . .

Mr. HELLYER: I think his party would be prepared to have someone sit in for him.

The CHAIRMAN: This is a technicality, the motion as such. If you wish to amend the motion, go ahead and do so.

Mr. HELLYER: That would be my amendment, Mr. Chairman.

The CHAIRMAN: Then Mr. Hellyer's amendment, as I understand it, is to just change the words "with despatch" to "next meeting"; is that it?

Mr. HELLYER: Yes.

The CHAIRMAN: Those in favour of Mr. Hellyer's amendment?

The CLERK OF THE COMMITTEE: Three, Mr. Chairman.

Mr. HELLYER: I was hoping that that would commend itself to some of the slower members of the committee, Mr. Chairman.

The CHAIRMAN: Those contrary to Mr. Hellyer's amendment?

The CLERK OF THE COMMITTEE: Seven, sir.

The CHAIRMAN: Those in favour of the original motion, please? Unanimous. Thank you, gentlemen. Now may we go along. As I pointed out, we are on pages 322 and 323; votes 226 and 227. Mr. Minister, at the close of the last meeting this document was distributed to the members present. I do not think it has been printed as an appendix as yet. Is it your wish, gentlemen, that this be printed as an appendix?



Mr. MORTON: I would so move, Mr. Chairman.

The CHAIRMAN: Is that the wish of everybody? I do not think we need a motion.

Agreed.

(See Appendix "A")

The CHAIRMAN: Mr. Minister, did you wish to make any comments, or do you have a statement on Defence Research Board?

Hon. GEORGE R. PEARKES (*Minister of National Defence*): No, I do not think I need make any further statement. It has been outlined in the various pamphlets issued, and in this memorandum.

The CHAIRMAN: Then before we go on, Mr. Hellyer—the minister has just handed me information requested by you on engines for early models of F-104. May we place that in the proceedings also?

Agreed.

—The information is as follows:

Information Requested by Mr. Hellyer

Engine for Early Models—F-104

The CF-104 will be powered by the General Electric J-79-OEL-7 engine.

Earlier models of the F-104 were equipped with General Electric J-79-3 engines. The J-79-OEL-7 is an improved version of the earlier engine. It produces more thrust which is achieved by a better control system and a larger turbine.

The CHAIRMAN: With the minister today, gentlemen, we have Dr. Barrett, Chief of Establishments, Defence Research Board, of the National Defence team.

Have we any questions, gentlemen, on the first part of votes 226 and 227, on the first page; that is, on page 322? Are there any questions; or may the page carry?

Agreed.

The CHAIRMAN: Now we come to page 323, down to the item "Acquisition of Equipment". That includes pensions, superannuation—

Mr. HELLYER: I have just one question, Mr. Chairman.

The CHAIRMAN: Yes.

Mr. HELLYER: I have just one question on this, from a procedural standpoint. I would like to ask for additional information—inasmuch as the minister and members of the Defence Research Board think it can be given—as to the type of project being carried out at these various places. I just wonder where that should come in.

The CHAIRMAN: I think it would come now.

Mr. PEARKES: There is a general description given under each heading of the type of work which is carried out. If there is any particular establishment on which you want further information, I will endeavour to give it to you.

Mr. HELLYER: These are all pretty sketchy, Mr. Minister, and I just wondered if you have fuller information of a more specific nature.

The CHAIRMAN: I think when we had Dr. Field here he gave us rather a good breakdown. Possibly you were not at the meeting, Mr. Hellyer.

Mr. HELLYER: Yes, I think I was. Do you remember what page it was?

The CHAIRMAN: Is there any particular point under scientific administrative organization or under research at the Suffield experimental station, or in defence research at Shirley's Bay, or on any of these others that you would like to consider; or shall we go to page 323?

Mr. HELLYER: Does the minister, or any of his officials, have any further information in respect to the work being done at these various places by the board?

Mr. PEARKES: The general description is given in this pamphlet which I gave you. There also is reference in the white paper of 1959; it starts on page 13 and ends at page 15. Then there is a further statement in connection with this under paragraphs 25 to 30 inclusive in the pamphlet which was issued when these meetings started. If there is any particular information you want I will be pleased to give it.

Mr. HELLYER: To start with, could the minister tell us how many university students were hired by the board this summer, and how many university staff; this is for summer employment only.

Mr. PEARKES: 120 students and 20 staff.

Mr. HELLYER: Would that be distributable between these various establishments.

Dr. H. M. BARRETT, (*Chief of Establishments, Defence Research Board*): That is correct.

The CHAIRMAN: Are there any further questions on any of these points—Shirley's Bay, Esquimalt, Fort Churchill or Barriefield.

Mr. ROBERGE: In respect of the question of salaries, I would like to ask the minister if he feels that the salaries offered to these scientists are high enough to secure all the good scientists the department needs?

Mr. PEARKES: Within I think the last month there has been an increase granted to the scientific personnel. That is taken care of this year in the supplementary estimates of the Department of Finance. That was in conjunction with the general increase in all of the scientific positions in the civil service.

Mr. ROBERGE: What would be the average salary of the top scientist?

Mr. PEARKES: At the present time there are 623 scientists. The remuneration they receive, according to our estimates, is \$5,221,102.

Mr. ROBERGE: I can see that in the estimates; but what would be the top salary?

Mr. WINCH: Mr. Chairman, I know I am late, but would you mind asking the Minister of National Defence, on behalf of the government, how I am supposed to be in three places at the same time?

Mr. PEARKES: I have just solved that riddle by coming very quickly from another conference.

The maximum salary paid to any scientist is \$16,500.00.

The CHAIRMAN: Is that before the raise?

Mr. PEARKES: After the raise. Approximately \$5,000 is the lowest salary, and it goes up to \$16,500. That is the range for the scientists.

The CHAIRMAN: That includes their new raise?

Mr. PEARKES: Yes.

Mr. ROBERGE: What would be the range of salary of technical and supporting personnel?

Mr. PEARKES: Technical officers?

Mr. ROBERGE: It is the second item.

Mr. PEARKES: The maximum is \$7,200 and the minimum would be \$5,130.

Mr. ROBERGE: Thank you.

The CHAIRMAN: Are there any further questions?

Mr. HELLYER: Would the minister tell us how many people left the employ of the defence research board in the last fiscal year and whether the number was larger or smaller than the previous two or three years?

Dr. BARRETT: We have had a net loss in the last year of professional personnel of approximately 25.

The CHAIRMAN: Thank you, Dr. Barrett.

Mr. HELLYER: Would that be more or less than the previous two or three year average?

Dr. BARRETT: That is more.

Mr. HELLYER: And would that additional net loss, in the opinion of the minister, be due to the fact that the salary range was not increased earlier than it was?

Mr. PEARKES: Undoubtedly there has been a lot of pressure put on individuals to take jobs in commercial companies and in civilian life generally, and at universities. One reason that the salaries were increased was to balance that.

Mr. HELLYER: Realizing that many, if not most, of the employees of the board would be paid less than they would in comparable jobs in private industry, does the minister feel that the new range will be sufficiently attractive to keep them in government employ?

Mr. PEARKES: We hope so.

Mr. CHAMBERS: Is it not true there has been a fairly considerable raise recently in respect of comparable personnel in the universities?

Dr. BARRETT: That is correct. We have lost fifteen persons to university posts in the last year.

Mr. CHAMBERS: They have raised their salaries?

Dr. BARRETT: Yes; but I think this brings it back in line again.

The CHAIRMAN: Mr. Winch. I think you have some questions on this.

Mr. WINCH: In respect of the money being spent, what is the arrangement between Canada's department in this regard, the United States, the United Kingdom and others, so that there is no duplication? Also what is the specific work which is being done without duplication and with duplication by this department? Also in that regard I read the reports in the press of a certain investigation being done by the research development board on hydrofoils. What is the situation in this regard?

Mr. PEARKES: The range of work as carried out by the different establishments is enumerated in the pamphlet which was issued to the committee at the end of last Monday's meeting. Now you ask what means we have of contacting the research boards of other countries. We are exchanging information continually with the United States and Great Britain. Any information that we get in so far as research is concerned is exchanged with the similar bodies in the United States and the United Kingdom. It would be impossible to say that there is no duplication in the research field, because in the research field frequently you have parallel investigations going on in an effort to reach the same ultimate objective. A certain amount of duplication is necessary in the research field, but it is kept to a minimum by the frequent consultations which are held.

The chairman of the defence research board travels extensively both to Europe and to the United States in order to discuss these scientific matters in research with his colleagues in other countries.



You ask about hydrofoils. Hydrofoils have been tested at the naval laboratory on the Atlantic coast. That has been a promising field for research, the idea being that by the attachment of these, may I call them wings, to a small boat, the boat becomes more manoeuvrable and has much greater speed. You might be interested to know that there are many commercial companies operating ferries with hydrofoils. I saw in a paper not very long ago that one is to be operated on the Pacific coast of Canada in the near future going to Vancouver island.

The CHAIRMAN: You will recall, Mr. Winch, that we had Dr. Field here, and you did question him.

Mr. WINCH: Will the minister or Dr. Barrett categorically state that the money being expended on research and development is not duplicated anywhere else among our allies, and that they could not receive the same information without doing the same work in Canada?

Mr. PEARCES: I do not get that.

Mr. WINCH: Can you categorically state that this country with its small population of approximately 18 million, and with its limited funds, is not through its research department spending money upon something which is now being done in the United States or in the United Kingdom?

Dr. BARRETT: I would make the categorical statement that the research program and the development program we have under way in Canada today does not duplicate work that is being carried out in the United Kingdom or in the United States; it is contributing to the common fund of knowledge, and it makes available to Canada a very much larger program than could be obtained without carrying out this work.

Mr. WINCH: May I ask through you, Mr. Chairman, of the minister or of the witnesses, concerning the relationship of research development between Canada, the United States and the United Kingdom, what kind of meetings are held, and who lays down who does a certain type of work? Who does that? Is there a meeting of some kind?

Dr. BARRETT: In every field there are tripartite committees which meet to discuss the whole program in the various fields, such as in the armament field, the chemical and biological warfare field, the naval research field, the anti-submarine work and so on—there are committees which have Canadian membership, where we hold equal status with that of the United Kingdom and the United States, regardless of the fact that we are only a country of 18 million.

We are allocated certain parts of these research programs, and these meetings are held at appropriate intervals.

I can assure you that we do not undertake any work in those fields that is duplicating work that is going on in other countries. In many cases the work we have initiated here has made very major contributions to the whole program, because the size of the team is not nearly as important as the original ideas they come up with.

There are a number of fields, particularly in biology and physics, and the radar field, which involves the Prince Albert radar, and the field of anti-submarine research. It might be of interest to know that the development of the variable depth sonar in our naval research establishment has been adopted by the United Kingdom.

Work that is carried out here has made a real contribution. That is admitted by the United States as well as the United Kingdom.

Mr. WINCH: Is there money in these estimates for research on chemical warfare, and if so, what studies have been made by Canada in the field of chemical warfare?



Mr. PEARKES: There is research made on chemical warfare in so far as the defensive nature of it is concerned. You will see an amount of money which is allocated to the defence research chemical laboratories at Shirley's bay; I think it is given as \$997,000.

Mr. WINCH: Surely it is not merely \$9,000?

Mr. PEARKES: But all that amount of money is not spent on chemical research.

Mr. WINCH: How much of this is devoted to the study of chemical warfare?

Dr. BARRETT: We do not cost account these things; so this figure is very rough, but it is close enough. I would say that of the vote approximately one-third was spent on C.W.; that is the vote you have actually before you, with respect to chemical warfare.

Mr. WINCH: On what basis is Canada making certain studies of chemical warfare which are not being made by the United States or by the United Kingdom? What special studies are being made by Canada on Chemical warfare, offensive or defensive?

Mr. PEARKES: There are no offensive chemical studies being carried out in Canada. All our studies are essentially of a defensive nature. At Suffield they are carrying out experiments on how to minimize the effect of chemical warfare. These would have an important effect not only upon humans but upon livestock and crops as well; and the work that is done in that direction applies to chemical warfare.

Mr. WINCH: Might I then ask what is being done by way of chemical defensive operations and chemical warfare which is not being done by the United States or the United Kingdom?

Dr. BARRETT: I would answer your question in this way: that over the years there are tripartite meetings. This has been going on for some twenty years, and all during the war.

I would say our relationships in this field are closer than in any other, due to its history. As a result of these meetings, which are held in the United Kingdom and the United States and in every fifth year in Canada,—one meeting was held actually in these parliament buildings some three or four years ago,—an agreement is reached between the three countries as to the various fields for which they will be responsible.

In other words, we can allocate at a meeting the various fields, and there is general agreement on it; and in this way the work that we do in Canada is put into a common pool.

I mentioned a sum of money, and if you are wondering about the importance of it, I picked an excerpt from the last Congressional Record, so far as the United States is concerned, that is appropriate in this matter, and this is the recommendation they came up with:

The military sciences program is allocated \$150,993,000 in the budget, including certain Department of Defence directed activities. All of the army's basic research and most of its applied research is included in this program. Increased emphasis will be placed upon chemical and biological warfare research, the program for which is increased from \$19,000,000 to \$29,000,000. Special emphasis will be placed on defensive aspects of chemical and biological warfare, including detection, warning and protection as well as on an expanded program to develop new agents and methods of dissemination.

This is all agreed, and this is in a noted publication in the United States. As a result of this cooperation, for our expenditure of approximately \$1 million a year on this particular field, we have access to all this work that is going

on in the United States. This is simply for a research program. This does not include the total cost of running this program with respect to manufacture and development. This is just for the research side of it.

Mr. CHAMBERS: The witness mentioned one-third of this \$997,000. Does that include supervision of the respiratory assembly plant at Shirley's Bay?

Dr. BARRETT: It includes supervision, but it does not include any production. That comes out of another vote.

The CHAIRMAN: There has to be checking on this and that in connection with the respiratory systems.

Mr. CHAMBERS: This plant would involve respiratory design?

Dr. BARRETT: No, no, just straight supervision.

Mr. CHAMBERS: Do you not do design work at Shirley's bay?

Dr. BARRETT: Yes, we do, but the plan is to give supervision over the manufacturers to see that the material is made properly.

Mr. HELLYER: Do you do research work at Shirley's Bay on the mobile flame thrower?

Dr. BARRETT: Not now. That program has been closed out. That was done at Suffield; they did work on it previously at Shirley's Bay, but the program has been closed out there.

Mr. HELLYER: Have we a program in connection with batteries operating at low temperatures?

Dr. BARRETT: Yes, and for batteries for special use. In this regard a very large saving was made by the designing services. All this is considered as design work now, and we are really not developing anything in the way of batteries.

Mr. HELLYER: Have you had any development of a design of a superior nature which you would offer to the market?

Dr. BARRETT: We have developed a new technique in making cadmium batteries, but they have not been adopted.

Mr. HELLYER: In respect to this cable laboratory, this information may be on record somewhere, but you had a ship called the *Cedarwood* which has been used for research. Has it been retired?

Mr. PEARKES: The *Cedarwood* was discharged from service two years ago.

Mr. HELLYER: Was it replaced?

Dr. BARRETT: Yes, it has been replaced this year.

Mr. HELLYER: Was it replaced by a new ship?

Dr. BARRETT: No, by a rehabilitated ship.

Mr. HELLYER: What type of ship?

Dr. BARRETT: I would not like to answer definitely, but the name of the ship is the *Fort Frances*.

Mr. HELLYER: Is it an ocean-going vessel?

Dr. BARRETT: Oh yes.

Mr. PEARKES: I think it was a mine sweeper; it was one of the mine sweepers which was converted into a research vessel.

Mr. HELLYER: Could the minister give us some idea of the type of equipment being tested at the present time, or which has been tested in the last year at Fort Churchill?

The CHAIRMAN: I think Dr. Field mentioned that at our seventh meeting, regarding Fort Churchill, and the type of equipment being tested.

Mr. PEARKES: It is mainly scientific equipment which is being required to carry out tests of the effect of objects passing through the aurora belt. That is the main test that is being carried out there.

Mr. HELLYER: I think the defence research board had an addition made to their main installation, and they had a group which was involved in testing equipment for both Canada as well as the United States forces.

Mr. PEARKES: Yes; there are two types of tests there, the IGY, which was a scientific test, and which was held by an international body, and we are allowing the civilian NASA which is an American scientific body to use the equipment at Churchill which was installed by the Americans for the international geophysical year. In addition to that, permission has been granted to the American army to test certain of their weapons in cold weather: and we also carry out tests of Canadian weapons at Churchill.

We have two branches, the civilian and scientific branch, testing various types of short range rockets, going up into the atmosphere to test the effect of the aurora belt, and we have the weapons testing site at Churchill.

Mr. HELLYER: Would the minister care to say anything about the co-operation with the Americans and the national aeronautics space administration people? This would be very interesting in view of his statement with regard to the international geophysical year and continuing operations. Are any of our people engaged in coordinating the same type of research but under a somewhat different authority?

Mr. PEARKES: Yes, that is being carried out; some of those officials are under the defence research board now.

Dr. BARRETT: Yes, that is correct.

Mr. HELLYER: Does Dr. Barrett have any information on it?

Dr. BARRETT: We are continuing in our work at Churchill to probe the upper atmosphere with rockets, but the apparent interest in Churchill from this standpoint is the aurora belt, and this is of great interest to the United States, because this unique body of Canadians, and their work is very important in connection with the technique of ballistic missiles, because this aurora zone upsets all your detection devices.

Therefore anything we can do to determine how this will affect your radars and even your communication is of the utmost importance in devising defences against the ballistic missiles. Our main program is aimed at that, at the present time.

Mr. HELLYER: The defence research board is working with NASA in that particular field?

Dr. BARRETT: Yes, and we have a laboratory there. For instance, we have a program: we are preparing some rockets this summer, with instrumentation provided by the defence research tele-communications establishment, to make some studies of the ionosphere. This is all aimed at defence against the ballistic missile.

Mr. ROGERS: Mr. Chairman, I would like to ask the minister this question: with the advent of this new venture at Suffield, do I understand that the Canadian team is working with the United States and United Kingdom teams at Suffield?

Mr. PEARKES: This is not a new venture at Suffield. Suffield was started either before or during the second world war. It was started in cooperation with the United Kingdom.

I could not tell you whether there are actually any American scientists there continually. They visit the place frequently—and there are some from the United Kingdom.

Dr. BARRETT: That is correct. I think perhaps the gentleman's question refers to the blast program.

Mr. ROGERS: That is right. Are those teams actually at Suffield at times?



Dr. BARRETT: They come out for the duration of a test. There will be people coming from the United Kingdom and the United States. They bring in their own instrumentation, and we work in very close cooperation. The idea is to get the scale of blast, which is very important in defence against possible nuclear blast. But these are only high-explosive charges that are being used.

Mr. WINCH: You now have an expenditure for defence research and development in the amount of \$23,952,000. Would the director tell me who actually directs his department on the research that it does: is it National Defence, Defence Production, or—as you said just a moment ago—perhaps the geo-physical branch of Northern Affairs and National Resources?

Mr. PEARKES: There is a defence research board, which consists of a number of scientific advisers and the chiefs of staff.

Mr. WINCH: But who directs the work—you, sir, as Minister of National Defence?

Mr. PEARKES: As Minister of National Defence, I have the ultimate responsibility; but as far as detailing or advising as to the programs and projects which are to be carried out is concerned, that is done by the chairman of the defence research board, Dr. Zimmerman. There is a board which assists him in deciding on the projects which should be adopted; and then, of course, there is the international board, which reviews the projects of various countries to ensure that there is no unnecessary duplication. That is the tripartite body that Dr. Barrett has referred to.

Mr. WINCH: Did you authorize the money now being spent on hydrofoil experimentation on the Atlantic coast?

Mr. PEARKES: Certainly I take full responsibility for everything which is included in these estimates.

Mr. WINCH: Have you seen the reports, to the effect—I have not got them now, because Mr. Smith never returned them after borrowing them from me—that it had a completely non-military basis; but it was being done by your naval research board?

Dr. BARRETT: That is an incorrect statement.

Mr. PEARKES: It certainly has a very definite naval application, and the research which was being done at the naval establishment on the Atlantic coast was directed entirely towards the application of this hydrofoil system to naval vessels.

Mr. WINCH: May I ask, for what purpose?

Mr. PEARKES: Mainly for smaller vessels, and the possibility of making them more—

Mr. WINCH: I am sorry: for what use, in view of what you have told us now for 22 meetings as to possible future methods of warfare—for what purpose are you now developing, or spending money on hydrofoil which, as I understand it, is for use in connection with landing craft?

Dr. BARRETT: No—possible anti-submarine use.

Mr. WINCH: Hydrofoil?

Dr. BARRETT: That is correct.

Mr. WINCH: Then would you please explain it?

Mr. PEARKES: I think you are—

Mr. WINCH: How is it that that is being done? Would you explain it?

Mr. PEARKES: I think that when you are asking for a detailed explanation of a research project, I have got to say that is classified.

The CHAIRMAN: Are there any further questions, gentlemen?



Mr. WINCH: Mr. Chairman, I understand the director to say that the money being spent now on this experimentation or research on hydrofoil had something to do with anti-submarine research. Will the director tell us how. How is hydrofoil connected with anti-submarine research?

The CHAIRMAN: That is the point that the minister just ruled out as classified.

Mr. WINCH: Is that classified too?

Mr. PEARKES: I would certainly say that was classified.

The CHAIRMAN: It is classified, Mr. Winch. Are there any further questions?

Mr. HELLYER: Under defence research medical laboratories, Toronto, there is quite a wide variety of projects listed here.

The CHAIRMAN: At Toronto?

Mr. HELLYER: Yes.

Mr. WINCH: Mr. Chairman, could I come back to this very grave question. We have come to a point now of decision as to what is classified or not.

The CHAIRMAN: Mr. Winch, I have recognized Mr. Hellyer. After Mr. Hellyer has asked his question, we will come back to you.

Mr. HELLYER: I was wondering if this is still classified mainly as aviation medicine, or if aviation medicine would now be a small portion of the medical research being carried out—medical and human research.

Dr. BARRETT: A relatively small part of the program.

Mr. HELLYER: Could you say where the main emphasis could be placed at the present time?

Dr. BARRETT: I think the largest section of the defence research medical laboratory is in the human engineering section, which endeavours to design the machine to fit the man.

Mr. HELLYER: Has this primarily, would you say, to do with land operations as far as our army is concerned?

Dr. BARRETT: It includes everything; it goes right across all services.

The CHAIRMAN: It pretty well explains that here, if you will read it, Mr. Hellyer.

Mr. HELLYER: Fairly well. I did read it quickly; but I thought there might be some additional information which perhaps I could get, with your indulgence, because I know that you are such a patient man.

The CHAIRMAN: That is right; I am. Mr. Winch.

Mr. WINCH: Mr. Chairman, I would ask that you now give a ruling to this committee—

The CHAIRMAN: I would be very happy to do so.

Mr. WINCH: —as to what is, or what is not, classified as security or non-security information. I have asked a question regarding certain experimentation that I know is going on in hydrofoil, which is being done in the open in Halifax harbour, which only has to do with surface operation.

The answer given to us was that it had to do with anti-submarine operations. I just want to know what is classified and non-classified material. This committee is being stultified by the answer to this simple question that it is classified information.

The CHAIRMAN: You have asked for a ruling. I will give you a ruling first.

Mr. WINCH: What is classified information?

The CHAIRMAN: Anything that the Minister of National Defence—who is our witness today—states is classified, the Chair will regard as classified, because I consider that he should know what is classified and what is not. So

anything at any time here, that the Minister of National Defence—who is our witness—states is classified, the Chair will recognize as being classified. That is the ruling, Mr. Winch.

Mr. CHAMBERS: I have attended a good many meetings now, Mr. Chairman, and I think this is the first time that this has come up.

The CHAIRMAN: We have had it very, very seldom in these meetings. I do not know whether this is the first; but I certainly cannot think of another one. Mr. Winch, where the minister has said this is classified information. I think he has been very lenient with us.

Mr. WINCH: Lenient!—he has been damned baffling. He has said that anything on hydrofoil is classified.

Mr. WEBSTER: Mr. Chairman, might I suggest that Mr. Winch look at a copy of *Life* for early January, where he will read about hydrofoil and see what it is. It is not landing craft. He might be able to read it in the library.

Mr. WINCH: That is the very reason I asked you to give a ruling Mr. Chairman—because we are told something is classified in this committee, and yet you can pick up a newspaper, or a weekend magazine, and read all about it.

Is it not better to be told here what is going on, rather than to pick up something in the newspapers?

Mr. PEARKES: All I can say is that the research work which is being carried out in this field is the application of hydrofoils to anti-submarine warfare. I am not prepared to give the details.

Mr. WINCH: Mr. Chairman, may I now ask, on the development of new equipment, like the Bobcat, where the research and development board comes in on that? What kind of work do they do: how does that work?

Dr. BARRETT: I think this is another part of this paper.

Mr. WINCH: This is on research and development. Also, may I ask: if I presume there must be: we spend over \$23 million a year—your board comes up with certain developments, brand new, are they patented, or do you make them available to companies on free enterprise?

Mr. PEARKES: The \$23 million is spent for research. Once the project has reached a certain stage and the general research work has been completed, then it is taken by one of the services for development; and the supervision of the development is carried out by the defence research board.

Mr. WINCH: Could I ask now, therefore, how much money has been spent, or is contemplated being spent now in this estimate by your department on research and development of the Bobcat?

The CHAIRMAN: Are you sure you did not ask that on page 177?

Mr. WINCH: I am saying, on this estimate.

Mr. PEARKES: Something over \$600,000.

Mr. WINCH: By the department?

Mr. PEARKES: By the Department of National Defence.

Dr. BARRETT: I would like to point out one thing, Mr. Winch. The development vote is separate from the research vote. We are still talking about research. It is a separate parliamentary vote.

Mr. WINCH: This is research and development.

Dr. BARRETT: But they are separate.

The CHAIRMAN: Mr. Winch, as I explained, we are still on votes 226 and 227. I let you go a little, wee bit. Development is a vote of \$14,216,000, compared with a vote last year of \$21,565,000.

While you are looking at those, Mr. Winch, perhaps you will also look at the question you asked on May 27, where I think you will find a lot of your Bobcat questions answered. But you can check them over.

Mr. WINCH: No; I was told to ask them under this item.

The CHAIRMAN: Are there any further questions on votes 226 and 227?

Mr. PEARKES: May I correct one statement, Mr. Chairman?

The CHAIRMAN: By all means.

Mr. PEARKES: The *Fort Frances* is on the Atlantic coast, as a research vessel; and the *Oshawa* is on the Pacific coast.

Mr. HELLYER: Mr. Chairman, perhaps I may get back to the medical research for a moment.

The CHAIRMAN: Yes.

Mr. HELLYER: I presume there is liaison between the work of this station and the medical colleges and medical profession generally. Are findings made available to the medical profession, or would they be limited because some of them would be of a classified nature?

Dr. BARRETT: Most of the work of that body is unclassified: a lot of it is published in open literature; and it is carried out in cooperation with the universities across Canada. These laboratories work very closely.

Mr. HELLYER: Has there been the development of an anti-fatigue pill?

Dr. BARRETT: Not that I have heard.

Mr. HELLYER: If you start the development of one will you make it available to members of parliament as soon as possible.

The CHAIRMAN: My company makes them.

Mr. WINCH: Under research and development, I would like to ask is there anything in this year's estimates of your department or is there research on any phase of survival in the event of radiation?

Mr. PEARKES: Yes.

Mr. WINCH: If so, what is the research now being undertaken by your department?

Dr. BARRETT: At the defence research chemical laboratories work is under way on the biological effects of radiation and attempts to find out if anything can be done about them. In other words, they are examining with animal experimentation if there is any means by which to offset the effect of radiation.

Mr. WINCH: Is all the research concluded by your department on bomb shelters?

Dr. BARRETT: This is not a program we have been involved in.

Mr. WINCH: I understood you were last year and that it was on the basis of your report that we had the recent pamphlet issued by the department.

Dr. BARRETT: We may have given advice, but it was not initiated by the department.

Mr. WINCH: How do you give advice without research?

Dr. BARRETT: We do that frequently. We do not have to do the research ourselves. We have the information to give them. We do not duplicate it. All that is needed is to have people who can interpret the results of other people. We have not actually done the research on this ourselves.

Mr. WINCH: You have not yourself done any research on the bomb shelters?

Dr. BARRETT: I would say that.

Mr. WINCH: That is right.

Dr. BARRETT: Yes.

Mr. WINCH: You say that you have, in this coming year, studies which have to do with the effect of radiation.



Dr. BARRETT: Yes.

Mr. WINCH: But not with a survival operation.

Dr. BARRETT: That is correct, unless you wish to interpret that in respect of the work going on at Suffield; something may come out of that. The work going on there is applicable to this. It is not aimed specifically at bomb shelters although it is applicable to them.

Mr. WINCH: What is the tie-in with the Department of National Health and Welfare in respect of radiation fall-out in Canada?

Mr. PEARKES: That is done through the emergency measures organization.

Mr. WINCH: I am sorry, sir; perhaps you misunderstood me. What is the tie-in on radiation? I understand the Department of National Health and Welfare is responsible for the checking, and I think there are five points in Canada for checking. Is that tied in in any way with the studies I am told are being made on radiation and fall-out.

Mr. PEARKES: The information which is obtained is passed through the emergency measures organization. There it is coordinated by that branch.

The CHAIRMAN: Are there any further questions on items 226, 227 and 228 on pages 222 and 223.

Mr. HELLYER: Could you tell me what happened to the national aeronautics establishment and what it comes under at the present time?

Dr. BARRETT: There is a committee, the National Aeronautical Advisory Committee, that has a membership from the Defence Research Board and the National Research Council. This committee is supposed to coordinate. It is a committee which coordinates the research to make use of the facilities available for aeronautical research in Canada. It is administered by the National Research Council.

Mr. HELLYER: It is administered by the National Research Council?

Dr. BARRETT: Yes.

Mr. HELLYER: Whereas previously it was administered by the Defence Research Board.

Dr. BARRETT: It was for a time.

Mr. HELLYER: When did that change take place? Do you remember?

Dr. BARRETT: About last year some time.

Mr. HELLYER: Last year?

Dr. BARRETT: That is right.

Mr. HELLYER: Will this include the operation of the new wind tunnel when it is completed?

Dr. BARRETT: That is correct.

Mr. HELLYER: Do you have any idea of the main projects under way in respect of aeronautical research.

Dr. BARRETT: I have no idea. This is a national research council responsibility. I do not happen to sit on the committee.

Mr. HELLYER: To what extent is the defence research board participating?

Dr. BARRETT: We have no participation at all. We have membership on the committee; that is all. We are not involved in the operation of the wind tunnel. We are, however, paying part of the cost of the construction under our budget.

Mr. HELLYER: Of the wind tunnel?

Dr. BARRETT: Yes.

Mr. HELLYER: That is your only contribution in excess of membership on the committee.



Dr. BARRETT: That is correct.

Mr. HELLYER: If the Department of National Defence wished aeronautical research projects initiated that would be done through the membership on this committee.

Dr. BARRETT: That is correct.

Mr. HELLYER: But from your previous answer it would appear that there are no major projects being undertaken at the present time on your behalf.

Dr. BARRETT: That is right.

Mr. HELLYER: And so far as you know at the moment there are none immediately in sight.

Dr. BARRETT: That is correct.

The CHAIRMAN: May the three votes carry?

Mr. WINCH: No, Mr. Chairman, I would like to ask this question of the minister: you have a defence research board involving \$24 million and a national research board. I would like to ask, in the interests of efficiency, whether the minister has given any consideration to one research board?

Mr. PEARKES: Yes. This has been considered on many occasions and the consensus always has been that defence research should be separate from general national research. Defence research specializes on defence projects. The president of the National Research Council also is a member of the defence research board; by this means the opportunity of an exchange of information is provided and also the elimination of unnecessary duplication.

Mr. WINCH: Could I then ask the minister, would he mind enlarging a bit on that, because all research must be based on the same scientific principle. Why has it been decided that duplication is more efficient than unification?

Mr. PEARKES: I have just explained that there is not duplication. One of the steps which has been taken to avoid duplication is having the president of the National Research Council on the Defence Research Board. There is the most intimate exchange of ideas and consultation between those two bodies; but one deals with general science and general research, whereas the other devotes its attention to purely defence projects. Sometimes these defence projects also have a commercial implication, but the Defence Research Board essentially is dealing with projects which have a bearing on national defence.

Mr. WINCH: So you feel that there is a greater efficiency at a table conversational level than at the laboratory level.

Mr. PEARKES: I think we are getting far better results by having a separate defence board rather than by having all defence projects considered by the national research council. We have our chiefs of staff sitting on the defence research board.

Mr. WINCH: All scientists?

Mr. PEARKES: I am saying we have the chiefs of staff sitting on the defence research board, so that they can be quite certain that the projects undertaken by the board are of a nature required for national defence.

Mr. WINCH: But could that not be done through the National Research Council?

Mr. PEARKES: I do not think it could be done so effectively, because the scope of the National Research Council is so much wider than the narrower field of defence research.

Mr. WINCH: That is my very point—because the national research board has a wider field of work. Why then could they not perhaps do more than the Defence Research Board.

Mr. PEARKES: The Nation Research Council, as I say, has a wider field for all these commercial projects which they have to handle, whereas the defence research board concentrates on defence projects; but because of the close liaison between the two there is a free exchange of results of the research by both bodies, so that if something is discovered by national defence which has a commercial implication that information is made available to the national research council.

Mr. WINCH: In other words, sir, you like and would recommend the retention of a strictly national defence research establishment not coordinated with an overall Canadian national research.

Mr. PEARKES: Of course not. I recommend the retention of a defence research board which is closely coordinated, not which is not coordinated.

Mr. WINCH: But not part and parcel of it.

Mr. PEARKES: Not part and parcel with it; closely coordinated with it.

Item 228 Development ..... \$14,216,000

The CHAIRMAN: Shall these three items carry Nos. 226, 227 and 228?

Mr. HELLYER: In respect of the operation of the project to launch a satellite in Cooperation with the Americans for obtaining certain scientific information, could we have a further report on that project?

Mr. PEARKES: I can report that the project is proceeding according to schedule. It was referred to in the house on several occasions. I think that the instrumentation is to be ready by late 1961.

Mr. WINCH: May I ask what that has to do with national defence? Is this part of a program to have a satellite doing photographing instead of the other?

Dr. BARRETT: No.

Mr. WINCH: Why is it being done by the research board of national defence?

Dr. BARRETT: The answer to that question is there is an atmospheric layer. This is still part of the work our telecommunication establishment is carrying out. In studying the communication of radiation through the ionized air in the upper atmosphere we studied this from the earth with instruments. The availability of this type of satellite which can go into the upper space gives us a chance to observe what a ballistic missile would be like looking down through this. In other words we want to find out how much this layer will cut out of our detection sources. It is a piece of pure unclassified defence because it is being launched by a purely civilian agency in the United States. It has a very marked military application, it has nothing to do with television cameras or the taking of pictures.

Mr. WINCH: May I ask the minister why this is going to be launched by a strictly civilian group in the United States, while the instrumentation is going to be done by a military force of Canada, and that is the Defence Research Board?

Mr. PEARKES: The answer that I gave in the house on this question on March 9 of this year—

Mr. WINCH: I want the answer which you will give here today.

The CHAIRMAN: Just a moment, please.

Mr. PEARKES: This research project is a study of ionized layers of the atmosphere at heights of from 200 to 700 miles above the earth. The information and study is of basic scientific interest and is applicable to the problem of long distance range communication, and to calculations of target accuracy of long range radars. That is the object of it.

Now we are using this civilian organization to be our agent in so far as the launching of this rocket is concerned.

Mr. HELLYER: I do not know just where it is on the page.

The CHAIRMAN: It will be on items 226, 227, or 228; but let us go ahead.

Mr. HELLYER: Grants in aid are being made to Canadian universities. May we have a note as to the extent of the grants presently in operation?

Mr. PEARKES: Grants are made to all the major universities across Canada in order to encourage the university staff to carry out certain tests and certain research work on specified items. There is \$1,695,000 contributed to the universities for this purpose.

Mr. HELLYER: Could the minister give us some indication of the nature of some of the major or most interesting projects?

Mr. PEARKES: There is a very wide range of subjects, I can tell you that. There is a very long list. They deal with atomic warfare research, battery research, chemical warfare research, civil defence, clothing and general stores, human resources research, arctic medical research, naval medical research, and materiel research and in the actual technical field, there is oceanographic research, weapons research, operational research, and so on. There are many projects which are being carried out, and, as I say, the amount of money is distributed over a wide range of universities.

I have a list of the universities, if you would like to have it read out; there are 25 or more universities concerned.

Mr. HELLYER: For instance, under the atomic warfare research project, what type of information would you be interested in there? Is that tactical research for ground forces?

Dr. BARRETT: That involves a group that is processing debris. That is part of this program of survival from fallout that occurs after the explosion. That is not very active now, because there have been no nuclear explosions lately.

Mr. WINCH: I come back to what I was trying to get a little while ago as a member of the estimates committee. I believe there are five check stations for fall-out radiation that are under the Department of National Health and Welfare. Where do you fit in with that?

Dr. BARRETT: During this period of time we are not doing very much on this. This amount is in here as an estimate; it may or it may not be spent.

The way we proceeded previously was as follows: when there was a nuclear explosion carried out in another part of the world, we would send aircraft up to sample it; but those were not ordinary fall outs, where we attempted to carry on detection tests of explosions being carried out both in the United States as well as in Russia.

Mr. WINCH: How do you tie it in? We were told about two months ago by the Minister of National Health and Welfare, concerning the nuclear explosion by the French on the Sahara, that from check studies made in Canada there was a big increase in the radiation field.

Dr. BARRETT: That is right.

Mr. WINCH: Do you also send up planes to check on that? How are they carrying it out?



Dr. BARRETT: It is the responsibility of the Department of National Health and Welfare, now. We have not taken any samples for quite some time now.

Mr. WINCH: You did take them following the Sahara explosion, did you not?

Dr. BARRETT: I do not know; I would have to check on that.

The CHAIRMAN: The point is that National Health and Welfare are doing it now, where you used to do it.

Dr. BARRETT: I do not know.

Mr. HELLYER: What page are we on?

The CHAIRMAN: Items 226, 227, and 228, up to page 323—to the bottom of page 323.

Mr. HELLYER: There is something which interests all of us, and which interests the Canadian nation as a whole, and it is the reduction in the proposed expenditures in reference to development. It is down this year from \$21,565,000 to \$14,216,000, making a reduction of over \$7,250,000.

The question which immediately arises is this: are there not important things which should be done? For instance, when the Avro Arrow program was cancelled out, did the minister not feel that there were other areas of development which he should undertake, not necessarily in the field of major weapons, but in the field of equipment, and in the field of things which would be useful to the Canadian armed forces?

What about rushing the development of mobile equipment, and that sort of thing? Did the minister not feel there were things which should have been done at that time with the money that was saved?

Mr. PEARKES: We are still carrying out an extensive development program, as is indicated by the fact that we are spending \$14 million on development in this year's estimates.

Mr. HELLYER: Is there any money being spent on the development of helicopters?

Mr. PEARKES: No, I do not think there is any money being spent on the development of helicopters.

Mr. HELLYER: Or on light aircraft?

Mr. PEARKES: Yes, we have a research program on the vertical take-off, but there is no development work being done on any special helicopter which is being developed for any of the services. There are helicopters in use now in the services, and, as I have mentioned before, consideration is being given to acquiring more helicopters of a proven design, rather than in the development of a new type of helicopter of our own.

Mr. HELLYER: Is there any research work being done in the field of the air-cushioned vehicles?

Mr. PEARKES: Yes, I am informed that there is money for research in the vertical take-off field.

Mr. WINCH: There is only one way to put a question. We in Canada are part of NATO; we have, outside of NATO, in the North American continent defences, certain treaties or other obligations with the United States. My question is this: with our tie-up with NATO, and with the United Kingdom, and with the United States with their population, government, and resources, what is Canada doing now which they do not also have information on in those countries, and what is this expenditure of \$24 million adding to the United States, the United Kingdom, and NATO? That is as bluntly as I can put it.



Mr. CHAMBERS: Mr. Winch seems to be advocating the sending of our scientists to the United Kingdom, the United States, or to other countries.

Mr. WINCH: No, I want to know what we are doing that is not being duplicated by the United States or the United Kingdom, because there are many ways in which we could spend that money otherwise.

Mr. CHAMBERS: We have had that answer four or five times already.

The CHAIRMAN: If you would refer to the minutes for Friday, May 27, you will find that your question was answered quite extensively by Dr. Field. Today we have had several questions asked, and you have had several answers. But if they do not seem to satisfy you, is there any one single point?

It seems to me that the minister has explained it, and Dr. Barrett has explained several things we are doing. Do you have an individual point or an individual item you wish to ask about? I do not see how you can get any more of an answer than you have already had to a general question.

Mr. WINCH: We have had a general answer.

Mr. HELLYER: I am not sure that the negative attitude of my friend in the CCF party is at all appropriate in this matter. I think the Canadian defence research board produces more results for every dollar of expenditure than any other like organization I have heard of; but my concern is that it is being starved for funds, when this is one field in which Canada can contribute so much. It has, it does, and it can. My question is why, when this is one field in which we can contribute so much for such a limited expenditure—why does the minister cut down the expenditure both for research as well as for development to the extent that he has?

There are a great many things we can do in conjunction with our allies to help keep abreast of the enemy, or to catch up in those fields in which we are behind. I do not think we are doing enough basic applied research in these matters.

Mr. WINCH: There may be one field in which Canada is not doing it.

The CHAIRMAN: Do you want the minister to supplement his remarks?

Mr. HELLYER: I want the minister to tell us why we are not doing more in this field in which we are so effective, when we have the men and the scientists?

Mr. PEARKES: You will notice that this year there has been an increase over last year's research from \$21,900,000 up to \$23,900,000, so you have an increase of \$2 million.

One of the main reasons we cannot do more research work is actually the lack of scientists who are available to us.

Mr. HELLYER: This proves that you should increase their pay.

Mr. PEARKES: As we pointed out earlier today we lost a number of scientists, and it has been particularly difficult, because of the general demand for scientists in commercial fields, for us to get the right type of man in this field. In order to encourage the right type of man to come in, the salaries have been raised within the last few weeks.

I agree with what you say, that this is a very important field, and that the defence research board is doing admirable work. But I do not think that it is practical for us to spend more money in this field with the staff we have at the present time, and I think it is extremely difficult for us to increase the staff with the right type of man that we want.

Dr. BARRETT: That is quite correct.

Mr. WINCH: Could the minister tell us if there are fields which he feels, as minister, should now be covered by Canada in research that we are not doing, and if so, what are they?

Mr. PEARKES: I think we are contributing a great deal, with the facilities which we have, in a number of these fields, as have been indicated in the course of meetings of this committee; and I do not think we are in a position to expand that research work at the present time.

Mr. WINCH: If you had more money, you could still spend it?

Mr. PEARKES: That is substantially correct.

Mr. WINCH: In other words, then, Mr. Hellyer, in his presentation, has not only got to find the money, but also the men?

Mr. HELLYER: Mr. Chairman, may I just—

The CHAIRMAN: Will you get on with the questions, Mr. Hellyer? It is getting a little late.

Mr. HELLYER: I just wanted to clear up this one point. When the minister said it was substantially correct, he meant that in order to recruit more scientists, the offer might have to be made more attractive; is that not correct?

Mr. PEARKES: As I have pointed out several times within the last few weeks, the scale of salaries for scientists has been raised. It will take a little while for that to be effective. I hope that it will not only encourage scientists in the defence research department to remain with the department, but it will also encourage some younger men to come into the field. But it is no good our trying to develop projects if we have not got the personnel to do so.

Mr. HELLYER: This is the staff side, Mr. Chairman. Surely this same staff could undertake more developmental work, if the funds were available?

The CHAIRMAN: What is the question?

Mr. HELLYER: My question is: could they?

Mr. PEARKES: My impression is, from what I know of it, that the staff is more than fully employed in carrying out the projects which they have; and I think there would be loss in efficiency if we added more projects to the limited staff that we have.

Mr. HELLYER: How many projects are farmed out to private industry on a joint basis?

Dr. BARRETT: We could give you that in dollars; I cannot give you the number of projects.

Mr. HELLYER: You do not have the number of projects?

Dr. BARRETT: I would not like to say the number.

Mr. HELLYER: Could you hazard a guess?

Dr. BARRETT: I would not like to give you a number.

The CHAIRMAN: You have the dollar figure?

Dr. BARRETT: We have the dollar figure.

Mr. WINCH: Mr. Chairman, at the same time, would the minister, through the director, perhaps, answer this question: on the projects under way now, how many are considered classified, and how many unclassified?

Dr. BARRETT: I have got the answer to your question, Mr. Hellyer. It is about 60 projects; and the expenditures are \$1,800,000 for those 60 projects.

Mr. HELLYER: Is Avro aircraft included in that list?

Dr. BARRETT: I think they are included.

Mr. HELLYER: Was every effort made, at the time of the cancellation, to utilize the research capabilities of that organization, rather than lose them to this country?

Dr. BARRETT: Yes.

Mr. PEARKES: Yes.

Mr. HELLYER: Mr. Minister, how could you hope to do that with the expenditure of—I do not know what the proportion would be; but one-sixtieth of one point some million dollars?

Mr. E. B. ARMSTRONG (*Assistant Deputy Minister (Finance), Department of National Defence*): The figure we have just given, the \$1,800,000, is the amount of money that is in the defence research portion of the estimate, the \$23,900,000, for research contracts with industry. It does not include the portion of the subsequent vote of \$14,216,000, which is for development. I could not tell you exactly how much of the \$14,216,000 represents development contracts with industry; but certainly the largest proportion of that \$14 million would be in respect of contracts with industry.

Mr. HELLYER: Mr. Chairman, I wonder if we could get that information, and what the largest items, the largest components, of it would be—if not today, at a future meeting?

The CHAIRMAN: I imagine we could.

Mr. WINCH: Mr. Chairman, could I also ask the minister: of the \$24 million that is now being asked for this department for this current fiscal year, how much of that expenditure is on research of a classified nature which cannot be divulged to members of the House of Commons, and how much is of an unclassified nature?

Mr. PEARKES: I would say that the bulk—by far the larger portion of the research projects are of a classified nature. The very fact that they are not firm yet, that there is research work going on in some particular direction, is an indication that they are of a classified nature.

Mr. WINCH: In other words, then, we, as members of this committee and as members of the House of Commons, have no choice but to accept what you have to say with regard to these expenditures?

Mr. PEARKES: I have given a detailed list of the various items. You had the chief scientist here, who, gave a very complete account of the work of this board. If there is any particular item that you want to know about, I will be very pleased to give you as much information as I can. But details regarding these research projects are classified.

The CHAIRMAN: Shall the items carry, gentlemen?

Mr. HELLYER: Mr. Chairman, before the development part comes, I would like to say that I think it has again been demonstrated that the limitation on the amount we are doing here has been budgetary.

The CHAIRMAN: Are you going to have a question on this, Mr. Hellyer, or is this a speech?

Mr. HELLYER: This is a question on which we cannot get an answer because of what the minister has said.

The CHAIRMAN: Shall the items carry, gentlemen—votes 226, 227 and 228, down to the bottom of Defence Research and Development?

Agreed.

The CHAIRMAN: Gentlemen, tomorrow the Minister of National Defence cannot be with us at 9.30 in the morning. I would suggest, if it is agreeable with you, that we start with Defence Production estimates, for one meeting, and then come back to National Defence estimates.

Mr. HELLYER: Mr. Chairman, I have just one matter for clarification. On page 324 there is an item of \$1 for commitments. Has that been covered yet or not?

The CHAIRMAN: No, not yet.



Mr. WINCH: Then do I understand, Mr. Chairman, that tomorrow morning at 9:30 we will have the Minister of Defence Production.

The CHAIRMAN: Yes.

Mr. WINCH: We will be on item 1 of defence production?

The CHAIRMAN: That is right.

Mr. WINCH: The entire estimate on Defence Production will be before us?

The CHAIRMAN: Is that agreeable, that we have Defence Production estimates tomorrow?

Agreed.

Mr. HELLYER: And then on Friday?

The CHAIRMAN: It depends. The meeting has been called for 9:30. If it is 9:30, we will have to continue with Defence Production. If it is agreeable to you, gentlemen, to change the meeting to the afternoon, we can have National Defence—whichever you wish.

Mr. HELLYER: Mr. Chairman, we are given a choice, for a change.

The CHAIRMAN: Always; you know that. Then, gentlemen, I will see you all tomorrow morning at 9:30.

## APPENDIX "A"

DEPARTMENT OF NATIONAL DEFENCE  
DEFENCE RESEARCH BOARD  
ESTIMATES 1960-61  
\$23,952,000

Summary of Operations and Maintenance by Headquarters and  
Stations and of the Nature of the Research Involved

*Central Scientific and Administrative Organization,* \$6,404,000  
*Headquarters, Ottawa, Ontario.*

The item includes provision for the DRB HQ staff, the liaison offices' staff as well as that of the Joint Intelligence Bureau. The expenditures cover mainly salaries, travel, printing, stationery, allowances for the liaison offices' staffs, consultants' fees, etc. The Board's extramural research grant and contract programme is funded from this item, as well as the expenses (traveling and transportation only) of the Board's advisory committees and panels. All design costs, engineering supervision, etc. in connection with the Board's construction projects are also included under this item.

*Canadian Armament Research and Development Establishment,* \$6,213,000  
*Valcartier, P.Q.*

The bulk of the armament research and development for the Canadian Armed Forces is carried out at this Establishment. It is organized and equipped for basic research and development in conventional weapons, explosives and propellants. The major effort of the Establishment at this time continues to be in a program of research directed towards the problems of defence against the ballistic missile.

*Suffield Experimental Station,* \$2,873,000  
*Calston, Alberta*

This station is organized to carry out basic laboratory research, field trials, and applied research in the defensive aspects of chemical and biological warfare. In addition there is an extensive program dealing with the phenomena associated with the shock and blast from large chemical explosive charges. This rather new aspect of the Station's program has a very close Tripartite significance and is being well supported by shock and blast teams from the J.K. and the U.S.A. who are sharing the valuable basic information which is being obtained in the field of shock and blast.

*Defence Research Chemical Laboratories,* \$997,000  
*Shirley Bay, Ontario.*

This station is conducting fundamental and applied research into problems related to civil defence research, military defence physics and chemistry in the atomic and chemical warfare fields, protective equipment development, service battery problems, and the operation of a Pilot Plant for production of materials for defence use and provides for the technical supervision for the Respirator Assembly Plant which produces respirators for the three Armed Services.

*Defence Research Kingston Laboratory,* \$357,000  
*Barriefield, Ontario.*

This station is conducting fundamental and applied research into problems related to military and civil defence in the fields of biological warfare and medical aspects of atomic and chemical warfare.

*Grosse Ile Experimental Station,  
Grosse Ile, P.Q.*

\$20,000

In accordance with the agreement between the Department of Agriculture and DND, DRB will have use of the Station if required and DRB is contributing to the yearly maintenance costs up to an amount of \$20,000 annually.

*Naval Research Establishment,  
Dartmouth, N.S.*

\$1,623,000

This station is concerned primarily with research in the field of maritime warfare, with particular attention to problems of anti-submarine defence. The large portion of the Station's effort is directed towards Underwater Acoustic techniques for the detection of submarines. A smaller portion of the Station's effort is spent on studies of corrosion, paints and electroplating and hydrofoil research. The station also provides a technical service to the Royal Canadian Navy on a wide variety of ad hoc day-to-day problems.

*Pacific Naval Laboratory,  
Esquimalt, B.C.*

\$585,000

The primary role of this laboratory is anti-submarine research and this will absorb about 70% of the effort during 1961-62. The remaining 30% will be spent on ad hoc research and consulting services on a wide variety of technical and material problems submitted by the Maritime Commander Pacific.

*Defence Research Northern Laboratory,  
Fort Churchill, Manitoba*

\$203,000

This laboratory continues to operate as a research and service support establishment in support of upper atmosphere research, the radar and communications program of the Defence Research Telecommunications Establishment as well as the rocket program for DRTE and CARDE.

*Defence Research Medical Laboratories,  
Toronto, Ontario*

\$1,025,000

The purpose of the laboratories is to conduct research on problems faced by personnel of the Armed Forces in the discharge of their operational and possible combat duties. As a consequence, the research program at DRML includes studies on factors related to human tolerance, vigilance and efficiency under conditions of heat, cold, motion, noise, fatigue, monotony and absence of gravitational effects; the design of equipment compatible with human characteristics and limitations; the provision of easily transported stable foods supplying an adequate, acceptable and balanced diet; and protection from the elements of the natural climatic environment.

*Defence Research Telecommunications Establishment,  
Shirley Bay, Ottawa, Ontario.*

\$3,652,000

The long-term objective of DRTE research is to aid defence communications, radar and anti-ICBM systems. The large extent of Canada and its location with respect to high magnetic latitudes and the auroral zone have led naturally to a concentration on radio propagation problems of the ionosphere and upper atmosphere. During the past year a very considerable proportion of DRTE effort has swung to space research techniques of exploration of the ionosphere because these techniques permit of measurements being made within and above the higher levels of the ionosphere.



ORDER OF REFERENCE

HOUSE OF COMMONS,

THURSDAY, July 14, 1960.

*Ordered*,—That the name of Mr. McIlraith be substituted for that of Mr. Roberge on the Special Committee on Defence Expenditures.

Attest

L.-J. RAYMOND,  
*Clerk of the House.*



## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S.

THURSDAY, July 14, 1960.

(24)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. this day. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Halpenny, Hellyer, Lambert, MacInnis, McIlraith, Morton, Parizeau, Rogers, Webster, and Winch—(12).

*In attendance:* The Honourable Raymond O'Hurley, Minister of Defence Production; Mr. D. A. Golden, Deputy Minister of Defence Production; Mr. W. H. Huck, Assistant Deputy Minister of Defence Production; and of the *Department of Defence Production*: Mr. R. M. Keith, Financial Adviser; Mr. D. B. Mundy, Director, Electronics Branch; and Mr. A. D. Belyea, Deputy Director, Aircraft Branch.

The Committee proceeded to consider the 1960-61 Estimates of the Department of Defence Production.

### *On Item 66*

The Minister made a statement on the operation of his department as related to the said estimates. Copies of the statement were distributed to members present. Messrs. O'Hurley, Golden, Huck, Mundy and Belyea answered questions arising from the statement.

And, consideration of the said estimates still continuing at 10.50 o'clock a.m. the Committee adjourned until 9.30 o'clock a.m. on Friday, July 15, 1960.

Eric H. Jones,

*Acting Clerk of the Committee.*





# EVIDENCE

THURSDAY, July 14, 1960.  
9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Today, gentlemen, we are taking the estimates of the Department of Defence Production.

We have with us the Hon. Raymond O'Hurley, the minister; Mr. Golden, his deputy minister, and Mr. Huck, his assistant deputy minister, as well as Mr. Keith, the financial adviser to the department.

Mr. Minister, do you have a statement with which you would like to start?

Hon. RAYMOND O'HURLEY (*Minister of Defence Production*): Yes.

The CHAIRMAN: Then, would you proceed.

## Item 66 Departmental Administration, \$8,323,356.

Mr. O'HURLEY: Copies of the statement have been distributed. However, before we start, I want you to make a correction at page 7 in the seventh line from the bottom. There has been a typographical error there. The figure should read \$450,000 instead of \$250,000 as is set forth in the report.

The CHAIRMAN: That is on page 7, the seventh from the bottom.

Mr. O'HURLEY: The following table sets out the amounts we are requesting this year, as compared with the year 1959-60:

### DEPARTMENT OF DEFENCE PRODUCTION

1960/61 ESTIMATES

Comparison with 1959/60 Estimates and Expenditures

Item	1960/61		1959/60	
	Vote	Amount	Estimates	Expenditures
<b>A.—DEPARTMENTAL</b>				
Administration.....	66	\$ 8,323,356	\$ 7,549,109	\$ 7,318,939
Care and Custody of Assets.....	67	400,000	882,011	343,158
	508	390,055		
Production Assistance.....	68	2,731,500	2,907,000	1,729,494
Grants in lieu of Taxes.....	69	129,175	105,021	105,020
Establishing Component Sources.....	70	950,000	950,000	281,948
Development Assistance.....	71	5,000,000	5,000,000	1,851,108
Sub-total.....		17,924,086	17,393,141	11,629,667
<b>B.—CROWN COMPANIES</b>				
Defence Construction (1951) Ltd.....	72	3,876,117	3,349,237	3,051,307
Canadian Arsenal—Admin.....	73	1,349,120	2,000,000	2,000,000
	509	1,500,000		
Canadian Arsenal—Capital.....	74	282,085	1,128,288	901,811
Sub-total.....		7,007,322	6,477,525	5,953,118
Total to be Voted.....		24,931,408	23,870,666	17,582,785
Minister.....		17,000	17,000	17,000
<b>TOTAL.....</b>		<b>\$24,948,408</b>	<b>\$23,887,666</b>	<b>\$17,599,785</b>

In my statement today I shall follow the order of the votes, Nos. 66 to 74, which appear for the Department of Defence Production in the 1960-61 estimates, which passing references to votes 508 and 509 in the supplementary estimates. I shall try to give you a general description of the work of the department and associated corporations during the current year and, in particular, to explain the differences between, on the one hand, the amounts which parliament is asked to provide, and, on the other, both the amounts voted last year and the expenditures actually made.

Copies of this statement have been distributed to you for reference purposes, prefaced by a table in which the current year's estimates are compared with the estimates and actual expenditures for 1959-60.

I have also included in the material which has been distributed, a memorandum describing the action which has been taken in response to each of the recommendations affecting this department made by the standing committee on estimates in 1958.

Since the principal activity of the Department of Defence Production—the purchase of supplies and services for the Canadian services—is financed by Department of National Defence funds, the estimates of my department do not really indicate the level or character of most of our operations. However our administrative vote serves as a rough indicator of our activities, and I shall therefore review the current program—except for those activities for which special provision is made in other votes—under the heading of this item.

At the outset, I want to emphasize that, as Minister of Defence Production, my procurement policies are governed by the duty, imposed by parliament, to develop and maintain the production resources needed in Canada to support our defence policy. This means that, wherever possible, we look to Canadian industrial facilities for the production of the weapons and equipment needed for our national defence. We also examine the supply requirements of the services to see how they can contribute to the creation of new Canadian industrial skills and facilities and the improvement of existing resources. This is absolutely basic to our operations. In our current purchasing for the Canadian forces we are looking to Canadian sources for the vast bulk of our needs.

In the aircraft production program, of course, the largest current project is the CF104 on which activity has now begun. The major contracting for this should be completed in the immediate future although much subcontracting remains to be done. As is well known, the prime contractor for air frame construction and final assembly is Canadair Limited and the J79 engines are being manufactured by Orenda Engines Limited. We are continuing on the basis of our original intention to use Canadian sources of supply wherever possible, and to distribute the work as widely as Canadian industrial capabilities will permit. One consequence of the program has been that it enabled the prime air frame contractor to sub-contract work on other programs which it would otherwise have done in its own plant. Part of the CF104 production must, for economic reasons, be carried out in the United States but the Canadian aircraft industry is also receiving American orders, under the production sharing program, both for finished aircraft, in the case of the Caribou, and for a wide variety of components relating not only to the CF104 itself, but also to the U.S. Navy's S2F anti-submarine aircraft and to helicopters. Again, these orders have been spread widely throughout Canadian industry with benefits to firms in the maritime provinces, the Ottawa valley and Manitoba as well as in the Montreal and Toronto areas.

The Argus anti-submarine aircraft production program is now nearing completion but with these aircraft entering service in substantial numbers there will be a major repair and overhaul requirement to be met by industry in the maritime provinces where most of the aircraft will be operating.



The electronics program consists of a very large number of individual projects. Reference to a few of the larger projects should indicate the kinds of work involved and the degree to which the Canadian electronics industry is concerned. The CF104 program has created a number of electronics requirements. Work on the NASARR fire control system is starting at Canadian Westinghouse and other Canadian manufacturers are involved in production of bomb and missile launch computers, sights and navigation equipment. The training simulators for this aircraft will also be made in Canada.

The air defence program has given rise to other important projects including a major communication system which is being built and installed by Canadian firms, and the production in Canada of radars to improve the Pinetree line. In addition, contracts have been received from the United States both for equipment to be incorporated in the Sage control systems of Canada and the United States and for components of the American ballistic missile early warning system.

Major airborne equipment being manufactured in this country includes the ARC 552 Communications set, identification equipment and a Canadian developed doppler navigator which has aroused strong international interest.

Finally, important work is being done in the field of submarine detection equipment including production of an advanced sonar of Canadian design and of sonobuoys for both the Canadian and United States navies.

The naval shipbuilding program has continued during the past year with particular emphasis on the construction of destroyer escorts of the Repeat Restigouche class.

Construction is in progress on the first five of the six destroyer escorts authorized. In place of the cost plus a percentage contracts of the earlier programs, we have introduced the target incentive type of contract which encourages economy on the part of the shipbuilder by the introduction of incentives to cost reduction. All contracts for ship construction are being placed with Canadian shipyards experienced in this area of construction. These contracts represent the employment of Canadian skills and Canadian manpower.

The components to be introduced into the destroyer escorts come almost entirely from Canadian manufacturers: main engines from Toronto; auxiliary turbines, generators and much electrical equipment from Hamilton; gearing from Montreal, rotor forgings from Trenton, N. S.; boilers from Galt; and the majority of steel from Canadian mills.

As in the case of the contracts for the ships themselves, the procurement of components is based on the use of contracts other than the cost plus type. These include fixed price contracts, fixed fee contracts, target incentive contracts and others of a type to encourage all possible economy on the part of the Canadian manufacturer.

Another major requirement is that of the naval fleet supply tanker. This was made the subject of competitive tender by Canadian shipyards, which was won by Davie Shipbuilding Ltd., Lauzon, Que. It involves the encouragement of shipyards to give preference to Canadian manufactured components.

The maintenance of the fleet has involved a large number of contracts placed in Canadian shipyards for refit and repair. Again these contracts provide badly needed employment in the Canadian shipbuilding industry.

Activity in the field of weapons and ammunition continues to reflect the decline in the relative importance of traditional armaments in modern defence plans. Within these declining limits, however, Canadian needs continue to be met very largely from our own production facilities. Currently, the new family of small arms weapons and its associated ammunition constitute the largest single element in this program. This work is being done entirely in Canada. On the other hand, heavy gun production in this country has virtually ceased. The only current requirement is for naval guns which must, because

of the limited numbers involved, be purchased from the United Kingdom. Gun ammunition, however, continues to be manufactured in this country in a wide variety of types, together pyrotechnics, anti-submarine weapons, and torpedoes for both the Royal Canadian Navy and the Royal Navy.

Finally, I might refer to the general purchasing program for all those supplies and services which do not normally require special production facilities. This includes the innumerable items needed to clothe and feed the armed forces, to protect their health and welfare and to keep them mobile, as well as the services needed for their day to day maintenance. These commonplace requirements, which continue from year to year with little change in value, are met almost entirely from Canadian sources.

I might sum up this brief review of the defence production program by giving the committee a few figures which are, I think, particularly relevant to what I have been saying. In 1959-60 we spent for supplies and services on behalf of the Department of National Defence, \$654 million. This was about 12 per cent lower than the level of expenditures in 1958-59 and continued a decline in defence production expenditures which have been continuing for some years.

Out of this total spending last year, \$593 million went directly to contractors in Canada. To put it differently, expenditures by my department to foreign contractors represented 9.3 per cent of total payments during 1959-60. There was an increase of \$12 million over 1958-59 when the corresponding ratio was 6.6 per cent. This increase, of course, is a consequence of developments which are well known to members of the committee. These developments include the growing integration of North American defence measures, the increasing complexity of many major defence systems, and the reduced numbers in which these new defence equipments are needed by Canadian forces. The full impact of these developments is now being felt. It should be recognized, however, that while the level of our foreign purchases may increase, the production resources of Canada will still be able to supply the great bulk of our needs. And, of course, as the value of our purchases from the United States increases, we shall count on the production sharing program to provide an appropriate increase in the flow of American orders to Canadian industry. In other words, we are no less concerned than before with the development and maintenance of Canadian defence production resources, and the production sharing program should be viewed simply as one particular expression of this basic policy in action.

There is one important new function reflected in the estimates for 1960-61. An Emergency Supply Planning Branch has been established within the Department of Defence Production to undertake the planning and organization necessary to permit a War Supplies Agency to come into existence immediately should a nuclear attack be made on this country.

Mr. MACINNIS: Mr. Chairman, we are having difficulty hearing along the table. There seems to be a lot of talking going on.

The CHAIRMAN: Thank you, Mr. MacInnis.

Mr. O'HURLEY: As the Prime Minister explained when advising the house at the last session of the government's decision to assign this planning task to the Department of Defence Production, the War Supplies Agency would be charged with responsibility and authority for all aspects of control over the production, distribution and pricing of supplies, both civil and military, during at least the early period of a nuclear war, other than production on the farm and the catching and landing of fish. Such a War Supplies Agency would combine the responsibilities carried out in the last war by the Department of Munitions and Supply and the Wartime Prices and Trade Board.

I wish to emphasize that this new Branch is a planning agency and should not be confused with the War Supplies Agency itself. Broadly speaking, the functions of the Emergency Supply Planning Branch with respect to supply planning are analogous to those of the Emergency Measures Organization in the field of civil emergency planning generally. In addition to being responsible for the preparation of a basic plan for the creation of a War Supplies Agency, it will thus also have responsibility for coordinating those aspects of emergency supply planning that are properly the responsibility of other branches of the Department of Defence Production or of other departments and agencies of the federal government, particularly planning in the Departments of Trade and Commerce, Agriculture and Fisheries.

The initial staff of the Emergency Supply Planning Branch is a small one, consisting of 8 officers and 5 clerical personnel. All but one of the officers have been appointed, and it is expected that this final appointment will be made in the near future. Later it is intended to establish a number of regional offices of the Emergency Supply Planning Branch across the country, similar to those already established by the Emergency Measures Organization of the Privy Council office.

All of the foregoing activities have a bearing on vote 66, which, you will note, shows an increase of \$774,000 over last year's estimate and \$801,000 more than was actually spent in 1959-60. The largest single item contributing to this increase is salaries. For the first time in eight years, we have found it necessary to ask for an increase in staff, amounting to a net addition of 74 positions. The largest block of new positions—42—are required for the intensified activities throughout the department in connection with the production sharing programme; as we become more and more deeply involved in the sharing of development efforts, there is a growing need for technical officers, and, simultaneously, the job of co-ordination becomes more demanding of time. Another 16 positions are involved in the new Emergency Supply Planning Branch. Twelve time and material recorders employed in the shipbuilding program have been transferred to DDP from DND. And in keeping with the departmental objective of improving its negotiating position in relation to industry, we are continuing to strengthen our staff of contracting officers. It has also been found that the growing complexity of new production programs, such as the CF-104, has placed a severe strain on both the technical and contracting manpower of the department. Wherever possible, additions to staff made necessary by new or more demanding responsibilities, are being offset by the elimination of positions no longer considered necessary.

Vote 67, and supplementary vote 508, for the care, maintenance and custody of standby defence plants, buildings, machine tools and production tooling, provides some \$90,000 less than the total provision made last year, but about \$450,000 more than was actually spent in 1959-60. To a large extent, the provision under this vote is contingent upon decisions to be taken during the course of the year covered by the estimates and requirements can therefore not be forecast with any close accuracy.

Vote 68 provides for capital assistance to industry and for the underwriting of certain tooling preproduction costs involved in bids submitted by Canadian industry for United States orders under the production sharing program. Again, there is a large contingent element in this Vote, particularly since it is not possible to anticipate the opportunities for bidding which are going to be encountered by Canadian industry nor the degree of success which they will enjoy. As you will see, the total provision made this year is slightly less than that of 1959-60, owing to a reduction in the forecast requirements for capital assistance.



Vote 69 is, I think, self-explanatory. The plants covered by this provision have been acquired by the crown under capital assistance programs of past years and are operated by private contractors on the same basis as industrial plants. The grants to municipalities in lieu of taxes are computed on the normal assessment evaluation by the municipality, taking account of the services rendered, and are estimated to equal the taxes which would otherwise be payable.

The provision made in vote 70 to establish qualified sources of supply of component parts and materials, is identical with that made in 1959-60. This is, as I explained last year, a selective programme in which we must weigh each case in the light of the quantities of components likely to be required and existing manufacturing capabilities on which we can build. While it is intended primarily to establish sources of components which will be needed for future Canadian military requirements, the likelihood of United States defence requirements is also taken into account.

Vote 71 continues the provision which was made for the first time last year to support select defence development programs as part of our Canada-United States production sharing effort. It is becoming increasingly clear that, as a result of the rapid pace of change in military equipments, the future success of Canadian industry under the production sharing program requires that Canadian engineering capacity be maintained and advanced to the greatest extent practical.

The remaining votes, as you will see, relate to crown companies which report through me to parliament. Vote 72, which provides for the expenses incurred by Defence Construction (1951) Limited in procuring the construction and defence projects on behalf of the Department of National Defence shows an increase of roughly \$327,000 over last year's provision. This is a direct reflection of the increase in the construction programme in 1960-61 which is accounted for largely by the special projects included in the Canada-United States joint defence program.

Vote 70 and supplementary vote 509 also provide for an increase in the provision made for administrative expenses of Canadian Arsenals Limited. As I explained last year, because of the decline in sales of this company, it has become necessary to revert to the practice of appropriating funds to cover a part of its administrative costs. At the time that the main estimates for the current year were prepared, it was thought that this financial requirement could be reduced by accelerating the production of ammunition needed by the navy in future years. It has subsequently been found impractical to do this and the additional funds must therefore be sought under the supplementary estimates.

Finally, you will notice that the provision made for the cost of construction improvements and new equipment for Canadian Arsenals Limited has been substantially reduced this year. This vote covers capital costs of a general nature and excludes any sums attributable to specific programs which would be covered by vote 68. The reduction from prior years is, of course, a reflection of the reduced volume of operations in the Canadian Arsenals plant.

This concludes my introductory statement, Mr. Chairman.

Now may I introduce the senior officials of my department. I have the directors of all branches of my department here, and during the course of the review of these estimates, any of the directors will be at your disposal to give you any information which you might desire.

THE CHAIRMAN: Thank you. Now, if you will turn to page 153 of your estimates book, you may mark the votes, and then we shall return to the minister's statement for general questions. On page 153, Departmental Administration, the whole page is on vote 66. Perhaps you would like to mark it in



there, and it continues on page 154 and down to the bottom of page 155. That is all vote 66; and, as that takes up the first seven pages of the minister's statement, perhaps we might talk on that first.

Then turn to page 156 under "Care, Maintenance and Custody of Standby Defence Plants, Buildings, Machine Tools and Production Tooling." That is vote 67 until you come to the "Estimated total for 1959-60" of \$474,248.

Then vote 68 is "for the Establishment of Production Capacity and for Capital Assistance for the Construction, Acquisition, Extension or Improvement of Capital Equipment Works, etc.", until the "Estimated total for 1959-60" of \$1,982,000.

Then vote 69 is "Grants to municipalities in lieu of taxes on Crown-owned defence plants operated by private contractors"; that is at the bottom of page 156.

And then vote 70 is "To establish qualified sources for the production of component parts and materials".

Vote 71 is "To sustain technological capability in Canadian industry."

Vote 72 is for Crown Companies.

Vote 73 is "Canadian Arsenals Limited—Administration and Operation Expenses", to the bottom of page 157.

And then to complete it, vote 74, on page 158 is for "Canadian Arsenals Limited—Construction, Improvements and Equipment". So those are your votes.

The first seven pages of the minister's statement related to vote 66. I think the best thing to do would be to ask questions on the minister's statement. Are there any questions on page one—general questions on page 1, or may the page carry?

Mr. McILRAITH: Mr. Chairman.

The CHAIRMAN: Are you a member of the committee, Mr. McIlraith?

Mr. HELLYER: Yes, Mr. Chairman, he is. May I introduce him?

The CHAIRMAN: We are glad to have you, Mr. McIlraith, but I had not heard it in the house, that is all.

Mr. HELLYER: It was passed in the house last night.

Mr. McILRAITH: I think, Mr. Chairman, that the house controls the appointment of members, and not the committee itself.

The CHAIRMAN: Please continue, Mr. McIlraith.

Mr. McILRAITH: I hope you will be very indulgent to my voice this morning. It seems to be absent, although the body is here.

The CHAIRMAN: We shall.

Mr. McILRAITH: There are some general questions I want to ask about crown companies. Only certain of them have votes, but my questions relate to the minister's policy, not to the crown companies themselves. May I ask my questions at this point?

The CHAIRMAN: They should be asked after we complete vote 74, which has to do with crown companies.

Mr. McILRAITH: My question has to do with the minister's policy for crown companies themselves, and some of the crown companies do not have a vote.

The CHAIRMAN: I realize that; and after we complete vote 74 on crown companies, that will be done. Are there any questions on page 1 of the minister's statement?

Mr. HELLYER: Could the minister give us an estimate of the cost of this extra document he prepared for us?

Mr. O'HURLEY: It was very modest.

Mr. HELLYER: The first item, "Administration" shows an increase of 14 per cent over the actual expenditure last year; and while this department is achieving less than it has in previous years, the output is less. How would the minister explain the increase in cost of 14 per cent, while at the same time he has administered a lesser output?

The CHAIRMAN: My thinking on this, if it is agreeable, is as follows: that instead of taking the votes as you have them, we would, instead, take up page 1 of the minister's statement, and ask any questions we want on those items prefaced there on page 1 of the statement.

Mr. HELLYER: This is related, I think; this is certainly item 1 "Administration".

The CHAIRMAN: As I see page 1 of the statement, the first thing he really mentions is "The largest current project is the CF-104 on which activity has now begun". Are there any general questions on that?

Mr. HELLYER: No. The first thing on page one is where he is talking about "Since the principal activity of the Department of Defence Production—the purchase of supplies and services for the Canadian services—is financed by Department of National Defence funds, the estimates of my department do not really indicate the level or character of most of our operations," and so on.

The CHAIRMAN: That is right.

Mr. HELLYER: He then goes on to say: "However our administrative vote serves as a rough indicator of our activities, . . .", and because there seems to be an inference in that word "rough", that suggests my question.

The CHAIRMAN: Go on.

Mr. O'HURLEY: Your question is what, Mr. Hellyer?

Mr. HELLYER: Why, as the output goes down, do the expenditures go up?

Mr. O'HURLEY: First of all, you have an increase in salaries, an upgrading of employees, and the work is down. These incentive contracts not allocated as much as before, it takes much more time; and even if they are allocated, it takes as many men and personnel to look after a small contract as it does to look after a large one.

And with our new system, as recommended by the committee in 1958, to tender for as many contracts as possible, it is taking more time and requiring more expense in the department. But I think the result is really satisfying. However, the major reason for the increase in the cost of administration is the upgrading of employees, and the increase in salaries.

The CHAIRMAN: Are there any further questions?

Mr. HELLYER: There has been quite a large increase in the complement just described, that is, the production sharing arrangement with the United States. Is that a principal reason?

Mr. O'HURLEY: We have 42 new employees.

Mr. HELLYER: That is quite a large number of new employees for a department which is processing fewer contracts than previously. Could you say what, in your opinion, it is in the new system which requires so much more work for so much less achievement?

Mr. O'HURLEY: I shall answer your question by giving you, branch by branch, where the increases were; then you will know the situation as it is.

Aircraft branch: In addition to the ten positions required for production sharing an additional seven are requested to cope with the problems confronted by the repair and overhaul division. A position is

required for a technical specialist in the instrument field and one on propulsion systems in No. 3 division. And additional three positions are needed in No. 1 division on the CF-104 program and to cope with the activity associated with the CS-2F and Caribou programs.

Ammunition branch: Five positions for development and production sharing.

Economics and statistics: The increasing demand for statistical analysis requires the addition of a statistician to this branch.

Electronics branch: Twenty positions are required for the development and production sharing program. An extra twelve are required to assist in administering functions in other procurement units.

Financial Adviser's branch: A new senior contracts provision officer will assist the financial adviser in interpreting departmental policies and procedures. A new contracts review officer position is requested to replace a position reclassified and transferred internally at supplementary estimates. One additional stenographic position requested.

Gun branch: The transfer of a torpedo officer from shipbuilding branch to gun branch accounts for an increase of one position.

Industrial security branch: An increase of one officer position and two clerical positions is as a result of the added security work involved with production sharing.

Minister's and deputy minister's offices: Seven positions required for development and production sharing.

Shipbuilding branch: Twelve time and material recorded positions will be transferred, with their functions, from D.N.D. The increasing workload on the director necessitates the re-institution of a deputy director. The coordination of field staff activities from Halifax to Victoria accounts for the addition of a deputy production administrator. The change in emphasis from the cost reimbursement type of contract to a fixed price and other incentive type contracts requires two contracts negotiators. A clerk 3 position is required in the planning and scheduling division. Extra stenographic assistance is sorely needed and an extra position is requested.

Mr. HELLYER: The minister stated seven additional personnel were needed in respect of the repair and overhaul of aircraft. Is the volume of repair and overhaul of aircraft that much more extensive than it was in previous years?

Mr. O'HURLEY: The point is you are trying to get away from any cost-plus contracts as much as possible, and then to tender incentive contracts, and thus do away with the cost-plus contracts. That requires additional personnel.

Mr. HELLYER: Surely, Mr. Minister, it would take more to administer the cost-plus project and audit than it would to administer a fixed contract?

Mr. O'HURLEY: We do not audit it.

The CHAIRMAN: Mr. Minister, why are you getting away from cost-plus contracts?

Mr. O'HURLEY: It was recommended by the committee in 1958, in the estimates in all the departments, to get away as much as possible from cost-plus contracts. We are trying to put it into practice, and I think it is very beneficial.

Mr. CHAMBERS: Mr. Minister, do you anticipate that these new types of contract result in a saving to the taxpayer?

Mr. O'HURLEY: Absolutely.

Mr. CHAMBERS: Can you make any estimate, on a percentage basis?



Mr. O'HURLEY: No.

Mr. CHAMBERS: But would the amount saved cover the expenditure for those additional personnel on the staff of the department?

Mr. O'HURLEY: We are convinced it does; that it is worth while.

Mr. McILRAITH: A supplementary question, Mr. Chairman. With regard to the term "new contracts", does the minister suggest that these incentive contracts are a new type of contract?

Mr. O'HURLEY: No, but we are putting in more and more of them.

Mr. McILRAITH: But they are not a new type of contract. They have been in use for a great many years, fifteen or twenty years?

Mr. O'HURLEY: Yes, but we have many more now.

Mr. HELLYER: We are told there are three additional positions in respect of the F-104. Why is the F-104 so much more complicated than, say, the CF-105 and the CF-100 projects, which did not require these extra positions?

Mr. O'HURLEY: That was an allocated contract, and while the F-104 is an incentive type contract, we are striving, as much as possible, to follow each such contract to get the best possible price and as much Canadian content as possible. While the CF-105 and the CF-100 were wide open for Canadian content, it was an allocated contract, and this contract is on a different basis.

Mr. HELLYER: The minister stated there were five extra positions in respect to ammunition development and production sharing. I wonder if he could tell us what ammunition we are developing and what production sharing we are doing in respect to ammunition.

The CHAIRMAN: Mr. Minister, in an effort to save time, if there is any question you would rather Mr. Golden answer, it is perfectly all right with the committee.

Mr. O'HURLEY: Regarding this program on ammunition, we have not any absolute results in our hands at the present time. We are negotiating with the United Kingdom to sell ammunition, and the United States to sell certain explosives. But we have not them right in our hands at the time being. It is a long-range project, and we think there is going to be some result from this expenditure we are making, and we have a man going around to get such sales. The indications are that we think there are going to be some good results from it. Regarding this program, Mr. Hellyer and members of the committee, it is not what we have in mind today that we have to consider. We have to consider, in this new technique of armaments today, what we might get tomorrow and a year from now. That is what we have to work on, if we are going to get any work in our defence establishments. We are working continually on what is coming up in a year's time.

Mr. HELLYER: "Continuing negotiations" seems to be the story of the life of this government.

You mentioned twenty additional personnel in the electronics division. Can you say specifically what they are doing, and why twenty additional personnel should be required now, at a time when you are not developing fire control systems and doing what was being done previously in this country?

Mr. O'HURLEY: I do not know how many of you understand anything about electronics, but I will ask Mr. Mundy to take that question on electronics.

Mr. D. B. MUNDY (*Director, Electronics Branch, Department of Defence Production*): I think that is attributable, mainly, to the production-sharing activities we have engaged in in the Electronics Branch. We have five new representatives in the United States who are very busily trying to obtain orders from the U.S. services for Canadian industry, with some considerable success.



We have recently had allocated to us the responsibility for the co-ordination of missile work in the department, and it is related largely to obtaining U.S. orders.

We have had a considerable increase, in fact a 200 per cent increase, in the number of invitations for bids from United States agencies for regular production contracts; and, I think, the success of this work has showed up in the success we have had in obtaining some of these contracts.

I think I should explain here, Mr. Chairman, that these activities relating to the obtaining of U.S. contracts involve some very complex, detailed work. First of all, we usually only get one copy of the bid and specification. We have to reproduce these and process them, and contact the companies by telephone. We have to do a lot of follow-up work in the case of the various bids that are received. Then we have to review them and see they are correct. We have to submit them on a very tight time schedule to the U.S. agencies doing the contracting.

When we receive the contracts we have to monitor them on behalf of the U.S. government. I could go on in considerably more detail; but I might just say there has been a very large increase in the volume of work related to that.

In addition to that we are engaged in the development sharing program whereby we are initiating, out of our own departmental funds, development contracts in Canada aimed at getting U.S. orders. Each contract requires technical officers to investigate very carefully the capability of Canadian firms, to ensure they fit in with U.S. requirements. They monitor the contracts and see them on their way. It is estimated that only three contracts can be handled by one man. Irrespective of the size of them, development contracts are all very complex, and we regard them as a most essential and vital feature of our efforts to obtain U.S. and other business.

In addition to that, in the Electronics Branch we have got on to a form of incentive contracting, which we feel is creating much greater efficiency in the electronics industry. Wherever possible we have a competition. It is not always possible to place a contract on a firm-price basis because of the complexity of electronic equipment. We have developed a target-incentive bonus with a ceiling arrangement, and it requires complex negotiations and complex monitoring of the contract. We feel we have made some progress in the direction of cost reduction.

Mr. HELLYER: You mentioned a 200 per cent increase in the number of U.S. bids. I wonder if you could give us the absolute figure.

Mr. McILRAITH: "Invitations to bid."

Mr. HELLYER: Yes, invitations to bid.

The CHAIRMAN: Do you mean the end result?

Mr. HELLYER: The total number in absolute figures, rather than in a percentage form.

Mr. MUNDY: I do not think I have them at the moment, but I can obtain them.

Mr. HELLYER: Perhaps the minister could answer this. Could we have the number of contracts that were obtained for Canadian industry, say, in the two preceding years, 1958-59 and 1959-60?

The CHAIRMAN: When did these five men go down?

Mr. MUNDY: On the establishment we have vacancies for five U.S. production-sharing officers. In point of fact, we have only been able to recruit and appoint four of them. We have one in California, largely dealing with the large missile contractors. We have one in Rome, New York state, at the U.S. air force procurement centre for ground electronics. We have one in New

York City dealing with diplomatic note procurement, DEW, and BMEWS, where we have opportunities to put up support for Canadian bids that go in. We now have one in the Boston area, which is a new electronics centre dealing with both the procurement and research development work.

The CHAIRMAN: I think Mr. Hellyer would like the percentage or amount of business we had prior to those men going down, compared with what we are doing now.

Mr. O'HURLEY: I think it would be interesting, Mr. Mundy, if you would give an account of the simulator work your department has been doing in Europe.

Mr. MUNDY: Right, sir. We have developed a system of procuring simulators on a firm price basis, which we think is unique in the world. This has been developed over a number of years by close team-work between our department and the departments of National Defence—

The CHAIRMAN: Would you explain to Mr. Hellyer what a simulator is?

Mr. HELLYER: I could explain it, for the benefit of the chairman. I have had the pleasure of sitting in one of them.

Mr. MUNDY: It is a training device which can simulate almost everything connected with the aircraft, including the sound of the tires going over bumps in concrete, if you really want that.

The CHAIRMAN: He will understand that.

Mr. MUNDY: It includes both simulation of flight and simulation of tactics. We have had quite a history of procurement in Canada, and we have now got before us a requirement for the F-104 simulator. The contract has been placed with Canadian Aviation Electronics, as the lowest bidder with the best technical proposal and the most satisfactory delivery for the R.C.A.F. requirement, amounting to something in the order of \$8 million. These are for six simulators.

The German, Belgian and Netherlands governments have adopted the F-104. They have been to us and have asked us to incorporate into our tender for Canadian requirements a parallel tender for their requirements, which are very large. I hesitate to forecast exactly how many there will be, but I would anticipate they are two or three times the size of the R.C.A.F. requirements.

As a result of incorporating this into our tender we had negotiations with the German, Dutch and Belgian governments, extending over several months, including the visits of several senior representatives of the electronics branch to Europe, to assist the German, Dutch and Belgian governments, who are unfamiliar with this type of equipment and this type of procurement, in establishing their requirements, assessing the tenders, and placing their orders.

We now have had an indication from them that they will place orders for simulators in Canada. We, as yet, actually have not received an order, but we anticipate we will get one within the next few weeks.

If we get this order—and there is every possibility now that we will—the repercussions on the Canadian electronics industry are going to be really significant.

As you know, we only procure something of the order of \$100 million worth of electronics equipment in Canada, of which only 60 per cent is actual equipment; the rest is in terms, mainly, of services—maintenance, repair, overhaul and associated equipment.

If we obtain this order, and it comes up to our expectations, it may be something like \$20 million and, as the simulators, due to the clause we put into the tender, are going to be largely manufactured in Canada—something of

the order of 80 per cent—the effect on Canadian industry, in terms of the prime contractors and his subcontractors is, we feel, going to be most significant.

Mr. GOLDEN: Mr. Chairman, could I add something.

The CHAIRMAN: Proceed.

Mr. GOLDEN: It is not whether we get the order or not, because it is possible we will not; but this takes up the time of these people in the electronics branch month after month, full time. They are doing nothing else but going to Germany, Belgium and Holland, and back and forth between the R.C.A.F., our department, prospective contractors, and contractors of the procurement agencies in Europe which are looking for a source for this new equipment and, during that period, we may not succeed in getting an order. But, during that period, a number of highly skilled technical officers are devoting full time to a possible contract which does not even appear in our books, because it is not a contract demand from the Department of National Defence, which does not require an expenditure of Canadian government funds. However, if we are successful we will get great plaudits. If we fail, we have to justify why they were busily engaged in this job.

I do not think Mr. Mundy meant to say we are certain that we are going to get this contract because, in this field of negotiation of contracts of this type one is not sure until one has them.

The main point is that a number of people have devoted almost all their time in an attempt to help Canada get this contract.

Mr. HELLYER: I assumed, from the article in this week's *Financial Post*, that the contract was practically in the bag.

We do not expect to get all the contracts, but what we really are concerned with is whether, over a period of time, and particularly in reference to the production sharing arrangements with the United States, you obtain a sufficient volume to justify the expenditure of effort. That is the point we are trying to make, and the thing we have yet to have proven to our satisfaction.

Mr. MUNDY: May I give an example of an actual contract that we have which, is, I think, related to the extra people we hired.

In the development section we hired two extra people; one was an anti-submarine warfare expert, and we have had him working night and day for something like four months, shuffling back and forth between Washington and our sonobuoy contractors. Negotiations have been very, very long drawn out but, as each difficulty has come up, it has been beaten down, only to be replaced by three or four others. However, gradually over a period of time all the difficulties have been erased, and we were successful, three or four months ago, in getting a contract for \$1½ million for sonobuoys to be built for the United States navy. In view of the state of the electronics industry, this is really important to the rather small firms that were involved in these contracts; it means the difference between being able to make a go of it and not being able to do so.

Mr. HELLYER: I know the electronics industry has been very hard pressed recently in this country.

Could you give us any indication of the fire control system installed in the F-104; are they being manufactured in Canada, or procured from the United States?

Mr. GOLDEN: They are manufactured in Canada under licence.

Mr. HELLYER: Are these fire control systems designed to handle the use of atomic weapons, as well as conventional weapons?

Mr. GOLDEN: We build what we are told to build.

I really do not think we could get anywhere in the department a group of people—if this line of questioning is going to be continued—who could



analyze what equipment is supposed to do. Our function is to take the specifications and go out and get it. Perhaps, we could get an answer to one question, but we could not follow it; we are not equipped in that way.

The CHAIRMAN: Mr. Hellyer, you can ask those questions when the Department of National Defence are back before us.

Mr. HELLYER: I have a question with respect to the transfer of this chap from the torpedo branch to the gun branch. You indicated you are no longer producing guns. Is that correct?

Mr. O'HURLEY: Heavy guns.

Mr. HELLYER: What would this chap be doing who was transferred from the torpedo branch to the gun branch?

Mr. GOLDEN: That is so because we have transferred the monitoring on torpedo contracts to the gun branch. I do not think the minister said there was no work there; he said there were no heavy guns manufactured. They are still procuring a number of items for the Department of National Defence. They are responsible for the sparing of the equipment they have, and it was decided it would be more appropriate to have the torpedo contract there.

Mr. O'HURLEY: Mr. Hellyer, have you any other questions on electronics?

Mr. HELLYER: No.

Mr. McILRAITH: Mr. Chairman, I have a question in connection with page 1 of the minister's statement.

The CHAIRMAN: For the record, Mr. Mundy is director of the Electronics Branch of the department.

Would you please proceed, Mr. McIlraith.

Mr. McILRAITH: My question concerns paragraph 3, the first sentence reading as follows:

At the outset, I want to emphasize that, as Minister of Defence Production my procurement policies are governed by the duty imposed by parliament, to develop and maintain the production resources needed in Canada to support our defence policy.

What I want to ask is this: has the destruction of the six pre-production models of the Avro added anything to your costs now, bearing in mind your duty to maintain production resources for future use.

Mr. O'HURLEY: You mean, because of building the airframe?

Mr. McILRAITH: No; having destroyed them. The government destroyed six pre-production models. They have destroyed them.

The CHAIRMAN: The 105.

Mr. McILRAITH: What bearing has that had on your maintaining the production resources needed in Canada?

Have you had to go back and do other expensive work to develop things you already had developed and then destroyed?

Mr. O'HURLEY: I do not see what effect it had.

Mr. McILRAITH: It has no effect, in your opinion?

The CHAIRMAN: Is there any money in this year's vote for the destruction of these?

Mr. McILRAITH: It is not for the destruction. That is not the point.

Mr. O'HURLEY: It is the technological skill that was required.

Mr. McILRAITH: Yes, and whether or not we lost a development resource by the destruction of those and if it is now, in this year's estimates, going to cost you money to try and get back?

Mr. O'HURLEY: No.

The CHAIRMAN: Are there any further questions on page 1 of the minister's statement.

Mr. McILRAITH: If that is so, then why is it necessary in any production of complicated equipment to have pre-production models?

Mr. O'HURLEY: Well, we had the pre-production model of the 105. However, it was cancelled. So, the skills that were used for the 105 can be readily obtained again. The 105 was completely cancelled for different reasons which the committee know all about. It has been explained several times.

The CHAIRMAN: Two hundred and twelve times, altogether!

Mr. O'HURLEY: But, apart from Canada destroying the pre-production models, the skill that was obtained is available yet.

Mr. McILRAITH: Well, the skill has dispersed, but the point is that the design and other things in development in respect of equipment has been lost.

I was quite in accord with your sentence here, in connection with your duty to develop and maintain the production resources needed in Canada to support our defence policy—and I think that has not been stressed enough over the past two or three years; but I wanted to get at the point as to whether or not you have done anything to weaken our position in that respect, by destroying the six pre-production models. You say you have not.

Mr. O'HURLEY: I said, no.

The CHAIRMAN: Mr. Morton is next, and then you, Mr. Hellyer.

Mr. MORTON: Mr. Chairman, I believe the question I have may be in order, in connection with the same paragraph that Mr. McIlraith was discussing.

I understand that certain companies have been assisted in the past by the government, in order that they may be able to supply various items required, in respect to financial assistance, buying equipment, and so on, to set up their plants.

Has there been any such assistance given this year for production of items which are necessary?

Mr. O'HURLEY: You mean development?

Mr. MORTON: Yes.

Mr. O'HURLEY: Perhaps Mr. Huck could answer your question.

Mr. W. H. HUCK (*Assistant Deputy Minister, Department of Defence Production*): Mr. Chairman, I do not think the question is in connection with development sharing; it is capital assistance.

Mr. MORTON: Yes.

Mr. HUCK: There is provision under another vote.

Mr. MORTON: Well, if it is under another vote, I will ask it at that time.

Mr. HUCK: It is in connection with vote 68.

The CHAIRMAN: Would you wait until we get there?

Mr. MORTON: Yes.

The CHAIRMAN: Mr. Hellyer.

Mr. HELLYER: The minister stated that the skills which had been disbanded at the time of the cancellation of the Avro Arrow are still readily available. How does he justify that when it is a known fact that a large proportion of the people involved in those skills, in the creation of that product, had disbanded and left for the United Kingdom, the United States, and elsewhere?

Mr. O'HURLEY: I will answer that by the declaration of Sir Roy Dobson who, as late as last Friday, told me he has kept a nucleus of his skilled engineers in the plant.

Mr. HELLYER: I do not think you would agree with that. He has taken some back to the United Kingdom, if he was referring to that plant, but I am sure the minister would not pretend that a sufficient number has been retained.

Mr. O'HURLEY: You admit there is still a nucleus of engineering skill.

Mr. HELLYER: I would say it is a pretty small nucleus, and I am sure the minister will agree with that.

Mr. CHAMBERS: Mr. Chairman, we are threshing some pretty old straw here.

The CHAIRMAN: Do you agree with the statement he made?

Mr. GOLDEN: Mr. Chairman, may I answer Mr. Hellyer's question asked earlier in connection with the exact number of invitations to bid received now as opposed to last year?

The CHAIRMAN: That was electronics.

Mr. GOLDEN: When Mr. Mundy mentioned the figure of 200 per cent.

I do not know whether this is exact enough, but the information is that during 1959, I.F.Bs. (Invitation for bids) averaged 50 per month. During May, 1960, it reached 120, and the average for 1960 is estimated to be at least 200 per cent of 1959.

Mr. HELLYER: The average would be 100 per month.

The CHAIRMAN: Any further questions?

Mr. HELLYER: No, but I will have some later.

The CHAIRMAN: Mr. Carter.

Mr. CARTER: Do we have production sharing arrangements with any other country besides the United States?

Mr. O'HURLEY: Well, we certainly work—and Mr. Mundy just gave you an example of that—with the United Kingdom, but not on such a big scale as with the United States.

Mr. CARTER: Is it essentially, though, the same thing?

Mr. O'HURLEY: Yes, we have representatives in England; we have an office in France, and one in Germany, apart from the technicians we sent to these different countries for different matters that might come up, if we think there might be a sale. We are working very strongly with the United Kingdom, and I wish to report to the committee that for the first time in years my officials tell me that the United Kingdom are interested now in production sharing with Canada.

Mr. CARTER: What are the channels? I am not quite clear as to how your department works, step by step. Through what channels do you get requests from the defence department? Do they come from the minister, or do they come from the services?

Mr. GOLDEN: A requisition will arrive from the Department of National Defence; and, of course, there are internal arrangements there requiring ministerial signature, if the amount is over a certain sum, or, if not ministerial signature, others are delegated with authority to sign for certain amounts.

That requisition goes through the deputy minister of National Defence, and then over to our office. And it is checked to see if it conforms with the money that has been set up; and then it is allocated in the Department of Defence Production to one of the branches set up to deal with that sort of thing. For instance, if it is a contract demand for electronic equipment, it will go to Mr. Mundy; and if it is for aircraft, it will go to Mr. Thompson, and so on.



Mr. CARTER: You do not get any requests directly from the services. They all come through the office of the minister, or through the deputy minister?

Mr. GOLDEN: That is correct.

Mr. CARTER: And when you get a request, it is passed on to the appropriate branch. But how do you determine whether you have any production sharing arrangement in connection with it, or whether you will get the order completely in Canada? What determines that? How do you base your decision, in that respect?

Mr. O'HURLEY: Our decision is always based on the principle of trying to get it in Canada.

Mr. CARTER: You explore every possibility with a view to getting it in Canada?

Mr. O'HURLEY: Absolutely.

Mr. CARTER: And if it is impossible, then you decide?

Mr. O'HURLEY: If we decide that the cost is too high.

Mr. CARTER: There is a cost factor?

Mr. O'HURLEY: Yes.

Mr. CARTER: How much margin are you prepared to give to a Canadian firm as compared to a United States firm, before you decide to put your order in the United States?

Mr. O'HURLEY: It exists, but we never really publish it.

Mr. CARTER: Oh!

Mr. HELLYER: It exists, but we do not know what it is.

Mr. O'HURLEY: Mr. Hellyer knows what it is.

Mr. HELLYER: Page 2?

The CHAIRMAN: Are you through with page one, Mr. Carter? Thank you. Now, Mr. Lambert.

Mr. LAMBERT: In your investigation of industry and the encouragement of industry, are you finding that there is any country-wide interest in the type of contracts or the work which you are able to encourage, or do you find it rather concentrated in eastern Canada? And is there any encouragement to put it on a rather country-wide basis?

Mr. O'HURLEY: Of course there are more facilities in Montreal, Toronto, and in the Hamilton area; but there is some work in the maritime zone.

Mr. MACINNIS: Eastern Canada now includes the maritimes!

Mr. O'HURLEY: Yes; but on account of transportation costs—I went to Winnipeg recently with my deputy minister, and we met businessmen in Toronto, and we were in Vancouver and Victoria, and we tried, if possible, to get more major contractors who would be interested in those sections where there is less defence work going on. I am very interested to get more defence work in these different areas.

For your information we have an industry at Edmonton, and it is quite active. I refer to Northwestern Industries. But aside from shipbuilding on the west coast at Vancouver and Victoria, we found it difficult to get into other fields. In Winnipeg there are firms which are very active, something along the same line as Northwestern Industries; but our policy is to try to get the program national, all over Canada, and not concentrated in two areas.

Mr. McILRAITH: That represents no change of policy.

Mr. MACINNIS: Oh yes, it does.

The CHAIRMAN: Are there any other questions on page 2, gentlemen?

Mr. HELLYER: Yes. On page 2 it says:

Part of the CF-104 production must, for economic reasons, be carried out in the United States . . .

I wonder if the minister could tell us what proportion of the cost of the CF-104 must be purchased in the United States for economic reasons?

Mr. O'HURLEY: The contract for the J-79 engine was given to Orenda in Toronto, and we understand that of the cost over 80 per cent will be spent in Canada. These figures are fluid, somewhat, but we are positive it will be more than 80 per cent for the engine; and for the fire control system, it is approximately 70 per cent in Canada. And for the airframe—what will it be, Mr. Belyea.

Mr. A. D. BELYEA (*Deputy Director, Aircraft Branch*): It will be over 70 per cent.

Mr. O'HURLEY: Yes, it will be over 70 per cent also.

Mr. HELLYER: The airframe will be over 70 per cent. What were the stipulations in the contract with Canadair in respect to what percentage of the airframe contract they could purchase in the United States? What were the contractual arrangements with respect to the differential in costs?

Mr. O'HURLEY: Mr. Belyea has replaced Mr. Thompson, who could not be here today.

Mr. BELYEA: Very careful arrangements have been worked out with Canadair on that particular point. Each subcontract is submitted to the Department of Defence Production for approval, before the order is placed.

Mr. HELLYER: Was this included in the contract with Canadair?

Mr. BELYEA: Yes, that is right.

Mr. HELLYER: Are you sure that no part of these arrangements were worked out subsequently to the signing of the contract?

Mr. BELYEA: No. The general principles were worked out at the time of the awarding of the original contract.

Mr. HELLYER: Can you tell me if there is any percentage or dollar maximum stipulated in the contract with respect to components which may be purchased in the United States?

Mr. BELYEA: No, there was no precise element.

Mr. HELLYER: Is there not a very flexible arrangement then which would reflect considerably the cost of production of the CF-104 airframe?

Mr. BELYEA: Perhaps I might put it this way: 60 per cent was considered to be the minimum, or at least the minimum Canadian contract content; but we have attempted to use a much higher Canadian content with the prime contractor.

Mr. HELLYER: Was that figure and arrangement stipulated in your invitation to submit bids in connection with this kind of contract?

Mr. BELYEA: No.

Mr. HELLYER: It was not. Then now would the participating bidders know to what extent they could purchase off-shore?

Mr. BELYEA: In our requests for quotations from possible bidders, we asked for the highest possible Canadian content, and we asked them to outline it to us, and they did so.

Mr. HELLYER: But they did not know about it.

The CHAIRMAN: In the original tender?

Mr. O'HURLEY: In the requests for tenders.

Mr. HELLYER: It would be absolutely set out in the specific tenders?

Mr. BELYEA: That is right.

Mr. O'HURLEY: And in a lot of other bids.

Mr. HELLYER: Is it not a flexible arrangement which could alter the cost of the airframe to the manufacturer, and whereby he could save millions of dollars?

Mr. BELYEA: The airframe manufacturer submitted his proposal, and he outlined the manner in which he intended to give out the subcontracts.

Mr. HELLYER: But there was no specific request?

Mr. BELYEA: That is right. We asked the contractor to supply a detailed study of the problem, so that each bidder would submit his best judgment on this matter.

Mr. HELLYER: How would the different bidders know that they were bidding on the same thing?

Mr. BELYEA: All the bidders were asked to submit the maximum Canadian content possible consistent with economy. We have done this with these three companies constantly over a period of years, and they understand our policy in this matter. We worked it out with them from time to time.

Mr. HELLYER: But to include in this the matter of content, intent, it would not describe what the difference was in a bid, let us say, as low as \$1 million; and if by buying even a million dollars worth of equipment in the United States a manufacturer would save a million dollars or more than if he bought that same equipment in Canada.

Mr. BELYEA: We examined the bids submitted to us, and the manner in which these companies were prepared to sub-contract; and while it is true there would be some significant difference, it was felt that on the basis of the examination that if, a company said it was in a similar line of business, we would look at the time factor, and we would look at the delivery schedules, because these would be problems in their setting up in Canada; and if the delivery schedule was the same as that of the U.S. contractor, so that the Canadian contractor, could make delivery of the components in accordance with the schedule, then this in some measure, would be taken into consideration when determining the amount of Canadian content in that contract.

Mr. HELLYER: My point is this: when the amount of Canadian purchased equipment, or the quantity of Canadian purchased equipment was not stipulated in the contract, how would it be possible to differentiate between two bids that were \$1 million apart, when all that is necessary to make a difference of \$1 million would be to purchase a small percentage of additional components in the United States?

Mr. MORTON: Suppose a tender was made on the basis that a company would supply, let us say, 65 per cent of Canadian content. They could not afterwards go back on that estimate without the government checking on it, if they should try to give less Canadian content.

Mr. O'HURLEY: In the Department of Defence Production we ask the bidders to give the highest Canadian content possible, and it is analyzed; I mean the Canadian content is analyzed, and the successful tender has to hold up to his obligation. We have been following a program to see that the Canadian content that he has subscribed to is absolutely followed. That principle applies to every contract that we give in the department.

Mr. CHAMBERS: Mr. Chairman?

Mr. HELLYER: May I have an answer to my previous question?

The CHAIRMAN: Just a moment. Mr. Chambers?



Mr. CHAMBERS: Would it not be possible at this stage of asking for bids to put in a fixed percentage of Canadian content, without leaving the department open to possibly very high costs? In other words, is it possible at that stage to fix the percentage of Canadian content?

The CHAIRMAN: A minimum percentage?

Mr. O'HURLEY: In some contracts, yes, and we do so.

Mr. CHAMBERS: I am talking about aircraft.

Mr. O'HURLEY: We could not do it for aircraft.

Mr. HELLYER: The minister has not answered my question as to how, when the amount of Canadian content was not described specifically in the invitation for the bid, he would be able to differentiate between two contracts which were that close, because it would be easy to effect an alternative in practice which would more than offset the difference in the bids? In other words, the practice is open to manipulation.

Mr. GOLDEN: The bids did in fact contain an estimate of the Canadian content by the bidders, and they were assessed by the committee. And after assessment, if any two companies put in their bids in exactly the same form, after making allowance for it, the committee would come to the conclusion that the estimated Canadian content was substantially the same in all the bids.

Mr. HELLYER: How would you define "substantially the same"?

The CHAIRMAN: That is simple.

Mr. HELLYER: If one is 65 per cent and another 70 per cent, would you say that is substantially the same?

Mr. GOLDEN: Regarding an estimate, in advance, of a contract of this type, that would be very close to it; although I would not quibble at 1 or 2 percentage points.

Mr. HELLYER: Even these one or two percentage points—with three or four or five percentage points difference, the difference in cost of purchasing off the tail end of the Lockheed line in California, as against in Canada, would exceed the bids.

Mr. GOLDEN: On the contrary, we are getting better prices, in many places, than Lockheed are getting. It is not true to say that in all cases it is better to go and buy in the United States. In some cases it is necessary, to meet the delivery requirements of the Department of National Defence; but it would not be correct to say that very substantial savings can be obtained by going and buying in the United States. In fact, we are getting better prices than Lockheed are in many cases. We are, in fact, sub-contractors to Lockheed on the 104.

Mr. HELLYER: That is part of the arrangement with them, as I understand it. But certainly where you may not get better prices in all components, is it not true to say that the tail end of a line production, with the existing tooling, is going to be cheaper than setting up new tooling and starting up a new line of production?

Mr. GOLDEN: That is true, but in this particular case we are getting better prices in Canada than we would in the United States.

Mr. CHAMBERS: I move we adjourn.

The CHAIRMAN: What is the committee's wish?

Some hon. MEMBERS: That we adjourn.

The CHAIRMAN: We will have the same department (Defence Production) tomorrow morning at 9.30, gentlemen.

ORDER OF REFERENCE

HOUSE OF COMMONS,  
THURSDAY, July 14, 1960.

*Ordered*,—That the name of Mr. Kennedy be substituted for that of Mr. Spencer on the Special Committee on Defence Expenditures.

Attest.

L.-J. RAYMOND,  
*Clerk of the House.*





## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S

FRIDAY, July 15, 1960.

(25)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. this day. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Forgie, Halpenny, Hellyer, Kennedy, Lambert, McIlraith, Morton, Parizeau, Rogers, Webster, and Winch (12).

*In attendance:* Mr. D. A. Golden, Deputy Minister of Defence Production; Mr. W. H. Huck, Assistant Deputy Minister of Defence Production; *of the Department of Defence Production:* Mr. R. M. Keith, Financial Adviser; Mr. D. B. Mundy, Director, Electronics Branch; and Mr. A. D. Belyea, Deputy Director, Aircraft Branch; and J. P. Stirling, Chief Engineer, Defence Construction (1951) Limited; and F. A. Milligan, Executive Assistant to the Deputy Minister.

The Committee resumed its consideration of the 1960-61 Estimates of the Department of Defence Production.

The Committee agreed to the request of Mr. Golden that certain revisions be made to the record of the Minister's statement presented at the preceding meeting. (*For details thereof see Corrigenda to issue No. 23, recorded on the second page of this issue*).

Mr. Golden answered questions asked of him at the preceding meeting; he was further questioned on matters arising from the Minister's statement to the Committee on July 14th regarding the operations of the Department of Defence Production.

### *On Clause-by-Clause consideration*

Clauses 66 to 74 were approved, thereby concluding the Committee's consideration of the said estimates.

At 10.52 o'clock a.m. the Committee adjourned until 9.30 o'clock a.m. on Tuesday, July 19, 1960.

Eric H. Jones,  
*Acting Clerk of the Committee.*



## EVIDENCE

FRIDAY, July 15, 1960.

9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

The minister is at another meeting right now. He will put in an appearance as soon as he can, but I have asked the deputy minister, Mr. Golden, to sit in for the time being.

*Continuing on.*

Item 66. Departmental Administration ..... \$ 8,323,356

Are there any further questions in respect of page 1 of the statement of the minister which he presented at our last meeting?

Mr. D. A. GOLDEN (*Deputy Minister of Defence Production*): Mr. Chairman, may I make a correction? I wish to apologize to the committee. The "gremlins" took over when the re-typing of the minister's statement was made, and there are two corrections I would like to make on page 9 of his type-written statement. At line 3 of page 9 of the statement, which was circulated, the increase should be roughly "\$527,000", and not "\$327,000", as was typed.

In the first line of the next paragraph it should be "Vote 73", not "Vote 70".

The CHAIRMAN: Are those the only corrections?

Is it agreed these corrections be made?

Agreed.

*(For detail, see Corrigenda on the second page of this issue.)*

Are there any further questions in respect of page 1 of the statement, gentlemen?

Mr. HELLYER: Have you any information today in answer to my question of yesterday?

Mr. GOLDEN: Yes, I have.

The CHAIRMAN: Is it a lengthy answer? If it is, would it be satisfactory to have it tabled?

Mr. HELLYER: I would like to hear what it is, Mr. Chairman.

The CHAIRMAN: All right; go ahead, Mr. Golden.

Mr. GOLDEN: In respect of the number of bids, first of all dealing with subcontracts, the number of bids requested—it is going to be difficult to follow this without looking at the paper, but the number of bids requested in 1959, the first quarter, 433; the second quarter, 433; the third quarter, 434, and the fourth quarter, 591, making a total of 1,891. In the first quarter of 1960, 804; the second quarter, 677, with a total for the first half of 1960 of 1,481.

The number of bids submitted in 1959: the first quarter, 327; the second quarter, 327; the third quarter, 327, and the fourth quarter, 430, with a total of 1,411. In the first quarter of 1960, 466; the second quarter, 521, with a total of 987.



In respect of the number of orders received in 1959, in the first quarter, 85; in the second quarter, 85; in the third quarter, 86, and in the fourth quarter, 109, with a total of 365. In the first quarter of 1960, 153; in the second quarter, 189, with a total for the first half of 1960 of 342.

Under prime contracts, the number of bids requested for the first quarter of 1959, 231; the second quarter, 232; the third quarter, 347; the fourth quarter, 347, with a total of 1,157. For the first quarter of 1960, 369; for the second quarter, 669, with a total of 1,038.

The number of bids submitted in the first quarter, 1959, 121; the second quarter, 122; the third quarter, 158, and the fourth quarter, 159, with a total of 560. In the first quarter of 1960, 183; the second quarter, 279, with a total of 462.

The number of orders received in 1959, the first quarter, 73; the second quarter, 73; the third quarter, 68, and the fourth quarter, 69, with a total of 283. In 1960, the first quarter, 87; the second quarter, 122, making a total of 209.

There is an explanatory note, Mr. Hellyer. I am not sure whether you have that or whether you want me to read it.

Mr. HELLYER: It does not matter, as far as I am concerned.

The CHAIRMAN: You might as well read it and get it in the record.

Mr. McILRAITH: Will this be tabled so that it will appear in the record?

The CHAIRMAN: Yes.

Mr. GOLDEN: Canada-United States defence production-sharing program, invitations for bids, requests for proposals and requests for quotas received from the United States. The explanatory note is:

Comparative information not available on fiscal year basis because subcontract data not available before January 1, 1959, when production-sharing records initiated. Therefore have given quarterly information from inception of program together with figures showing inquiries, etc. received by the Canadian Commercial Corporation during fiscal year 1958/59.

The CHAIRMAN: You may have some questions on that note, Mr. Hellyer?

Mr. HELLYER: Yes. The question I have is: Does the deputy minister have the dollar volume of the total orders received in 1959 and the first six months of 1960?

Mr. GOLDEN: No, sir, I do not have that. I have here the dollar value of the orders placed in Canada in the two fiscal years, 1958-59. That is \$49 million, but that does not include subcontracts, because we had no records at that time. Therefore, the figure for 1959-60 is not comparable because it is \$75.7 million, and it does include the subcontracts.

Mr. HELLYER: Do you have any figures for the earlier years, say 1957-58, or 1956-57?

Mr. GOLDEN: There are figures in our annual report, but I do not have any figures other than those that were tabled on February 9, 1960, as an appendix to *Hansard*. There is quite a complete summary of production sharing appearing there, starting with the year 1953. This appears at *Hansard* for Tuesday, February 9, 1960, in answer to a question put by Mr. Cardin.

The CHAIRMAN: Any further questions, Mr. Hellyer?

Mr. HELLYER: Yes. Mr. Golden, I have here an article written by Maurice Jeffries of the *Windsor Daily Star*, which gives figures from a United States official publication for their purchases in Canada during a certain period of time, and if uranium is deducted from the figures given by the U.S., as they

had been included, it says that American purchases in Canada in 1956 were \$213 million; in 1957, \$155 million; in 1958, \$135 million, and in 1959, and this was only the first six months of 1959, and is estimated at \$121 million, the total for the whole year. Do those figures sound reasonable to you?

Mr. GOLDEN: It all depends on what they are supposed to cover, Mr. Hellyer. They certainly do not sound reasonable at all to me, if they are intended to cover the type of contract that we have been including in our production-sharing statistics. They do not sound right at all.

The CHAIRMAN: Are those the total purchases from Canada of everything?

Mr. HELLYER: No, these were defence purchases.

The CHAIRMAN: Do you know what official paper it was published in?

Mr. HELLYER: It does not say.

Mr. GOLDEN: We did not include construction, or pay and allowances, or petroleum oil, lubricants or transportation.

Mr. McILRAITH: So that the construction of the DEW line and all this defence work that was done in earlier years would not be included?

Mr. GOLDEN: No, these do not include either one.

Mr. McILRAITH: So that the whole point is now that your figures cover a limited section of purchases?

Mr. GOLDEN: Quite so. The figures are intended to show just that portion.

Mr. McILRAITH: They show a limited section of purchases.

Mr. GOLDEN: The defence contracts relate basically to hardware and do not relate to pay and allowances, uranium or anything like that.

Mr. McILRAITH: They do not apply to construction in respect of electronic equipment, telecommunication, or anything of a defence nature involved in the modern electronic field?

The CHAIRMAN: The figures Mr. Golden has quoted are those figures controlled by his department.

Mr. McILRAITH: No, no, Mr. Chairman. That was the point we had out in the House of Commons with the minister. All those matters where his department was concerned, in respect of electronic telecommunications in respect of these early warning lines in the north, are excluded.

Mr. GOLDEN: These figures are excluded, on both sides of the border. They exclude fuels, lubricants, clothing and personnel equipment, food and other subsistence items, construction, services and many commodities purchased on an off-the-shelf basis.

Mr. McILRAITH: Just picking up the one word "construction", effectively excludes a great deal of work in the early warning system.

The CHAIRMAN: Are you asking a question now, Mr. McIlraith?

Mr. McILRAITH: Yes. This was covered in the House of Commons before.

Mr. GOLDEN: That is correct.

Mr. McILRAITH: They were trying to compare two sets of figures; in other words, when the United States was doing a great deal of defence work in Canada. The figures now produced and put in the report do not reveal that. They only reveal the specific items of a more or less hardware nature.

The CHAIRMAN: Were the others, Mr. Golden, more a capital nature of construction?

Mr. GOLDEN: Sir, when an attempt was made to come up with figures, that could be accepted by both countries, which would be meaningful, it was agreed that no good purpose would be served by introducing elements which do not

relate to defence production, as it is normally thought of, because, if you introduce items like that, it is very difficult to know where to stop, or where something becomes a raw material.

Mr. McILRAITH: That is right.

Mr. GOLDEN: That is why, in the attempt to see what the figures would be on both sides of the border, it was agreed to exclude construction and the purchase of fuel, and so on.

Mr. McILRAITH: If I might just proceed with the question in respect of the word "construction", this is where you get into the difficulty, because part of it is construction, as we understand it, of buildings in the ordinary sense, and part of it falls into an area where we are concerned with technical defence installations, for example, in respect of the early warning system.

The CHAIRMAN: What is your question, Mr. McIlraith? You are making a statement. Let us have your question.

Mr. McILRAITH: Mr. Chairman, I cannot reach my question. My voice unfortunately is not equal to yours this morning. I want to state my question.

The CHAIRMAN: Yes, but will you state your question without making a statement?

Mr. McILRAITH: Yes, if I am not interrupted until I have time to finish a sentence.

The CHAIRMAN: All right, make it short then.

Mr. McILRAITH: No, Mr. Chairman, I have no requirement to make it short.

The CHAIRMAN: Mr. McIlraith, just a minute, please; I want to tell you something. In this committee we ask questions: we do not make statements. Now, are you going to ask a question?

Mr. McILRAITH: Yes, Mr. Chairman.

The CHAIRMAN: All right, ask your question.

Mr. McILRAITH: Now, Mr. Chairman, having said that, I would like to ask my question without being interrupted until I have finished the sentence.

The CHAIRMAN: Ask your question then.

Mr. McILRAITH: Mr. Golden, what I was seeking to clear up was the difficulty arising out of the use of the word "construction". The items included in the word "construction" include, as distinct from ordinary buildings, and those things which would be included by the ordinary layman's use of the word, the type of construction that may be of a purely military significance other than commodities; that is the type of construction, such as the military portion of the early warning systems. Now, what I am asking you is this: the earlier construction figures that were excluded, would include that type of construction as well as the ordinary barracks or housing construction; is that a correct analysis of that point?

Mr. GOLDEN: The best way I can answer that, sir, is to say that anything that can be segregated as equipment would be listed as a production sharing item. If it cannot be segregated then it is possible it would have been included in what you have just described.

Mr. McILRAITH: Let me put it this way and if this is a matter of security of course you will stop me in respect of certain of these installations there is certain equipment, that I am sure is described as construction, but it is actually part of the equipment, in the sense that it is part of the equipment doing the job of picking up warnings. I do not want to get into difficulties with security material there.

Mr. GOLDEN: It would not be general that any of these items would be lost in general construction, but it is possible.



Mr. McILRAITH: That is fine.

Mr. GOLDEN: It is possible.

Mr. HELLYER: I would like to ask a question, Mr. Chairman. In fact there are not comparable statistics for earlier years to those given today in respect of 1958-59 and the first half of 1960?

Mr. GOLDEN: That is correct.

Mr. HELLYER: So there is no way that anyone can tell on exactly a comparable basis whether the defence contracts in Canada for equipment in 1958-59, and the first half of 1960, are greater or lesser than they were in the previous years?

Mr. GOLDEN: I cannot, offhand, give any better answer than the quite complete summary that appears in *Hansard* for February 9, 1960.

Mr. HELLYER: The reason the question was asked, as you appreciate, is that a number of statements have been made to the effect that the amount of American purchases was substantially higher, and yet this seems rather difficult to substantiate, on the basis of the statistics.

The CHAIRMAN: Are there more types of Canadian manufacturers getting into this defence-sharing business than there were two years ago?

Mr. GOLDEN: Yes, sir.

The CHAIRMAN: And, therefore, outside of construction, or capital expenditure by the United States and Canada, in your estimation they are buying more defence hardware, et cetera, in Canada?

Mr. GOLDEN: A wider number of Canadian contractors are now doing work for the United States military services, yes, that is correct.

Mr. McILRAITH: I have one supplementary question: of course, the terms "capital" and "construction"—you did not mean to have them used as synonymous terms?

Mr. GOLDEN: I do not think I used them.

Mr. McILRAITH: The earlier question related to them. There may be capital items that are equipment?

Mr. GOLDEN: Quite so.

The CHAIRMAN: Are there any further questions on page 1?

Mr. WINCH: Mr. Chairman, I want to ask a question, and I want it understood that I am not doing it because I believe that we should be thinking strictly on a regional basis; but, coming from the west, I would like to ask the deputy minister what appears to be the difficulty in either getting co-operation or in allocating more defence work to western Canada? It is quite obvious that little goes there.

Mr. GOLDEN: If I can answer that question without straying on to policy considerations—which would be improper for me to discuss—most of the contracting in the Department of Defence Production is done either by competitive tender, where the product is capable of definition and there are a number of suppliers; or allocation and negotiation, where there is only one possible supplier.

There are one or two major exceptions to these two principles, one of which directly affects the west coast. As I understand it, it has been the policy of the government to allocate the construction of destroyer escorts, based on the requirement of maintaining a certain number of shipyards in being, and in those cases certain destroyer escorts were allocated to the west coast, the east coast, and the river yards.

But the vast majority of items, as distinct from dollar value, are let by competitive tender either through the district offices for the requirements



of the local units, in which case only local suppliers are invited; or through head office in Ottawa, where anyone in Canada who expresses an inclination to bid, and who shows that he is in that business, is allowed to bid. No other consideration applies.

It is a fact that in a number of fields there is a very great concentration of Canadian industry in Ontario and Quebec, and in those fields Defence Production orders are a reflection of the economic situation as it exists. The bulk of the aircraft orders that we place are in Ontario and Quebec—and they are many other examples.

The CHAIRMAN: You just do not get the invitations to tender from firms, say, outside of Ontario and Quebec that you get from those in Ontario and Quebec?

Mr. GOLDEN: No.

The CHAIRMAN: Because the firms are not there?

Mr. GOLDEN: That is correct. The interest in the defence production business is a fairly accurate reflection of the economic situation in Canada, as far as the location of plants is concerned.

Of course, we do not know where the raw materials come from; but as far as the contracts which we place are concerned, it is certainly true to say that the vast majority of them are placed in Ontario and Quebec, although it is not always possible to tell, by looking at a tender acceptance or contract, where the contract is to be performed. This is because some companies, for ease of communication, give an Ottawa address, when in fact the contract is to be performed in some other part of the country.

Mr. LAMBERT: Supplementary to that: that is borne out by your semi-monthly publication. I notice, for instance, with respect to petroleum, that they show their head offices in Ottawa and Toronto.

Mr. GOLDEN: All the oil companies show Ottawa and Toronto, yes.

Mr. LAMBERT: And none of them is in Ottawa?

Mr. GOLDEN: And none of them produce it in Ottawa.

Mr. WINCH: Do you say, then, that western Canada is not in a competitive position? I am trying to run down, as far as I can, why this present situation exists.

Mr. GOLDEN: I think you have to look at that with a little more definition. With respect to local procurement for the local units, we do a very substantial procurement in British Columbia for local units. No competitive situation arises, because we do not allow anyone except local suppliers to bid for local units. The Vancouver office is restricted to the Vancouver area for its local procurements, in which there is no competition. This applies to the Victoria office, Regina, Winnipeg, Toronto, Ottawa, Montreal, and so on.

Therefore, from that point of view, of course, no question of a competitive situation arises. In many other fields there are just no British Columbia suppliers at all. I really would not be in a position to say anything worth while about the general competitive situation of British Columbia, because it would vary with the industry, the tender call, and so on. Certainly there has been a lot of discussion about the competitive position of the shipbuilding industry in British Columbia.

My understanding is that although the labour rates are high, the productivity is very good.

Mr. WINCH: I was going to come to that, because it is my understanding that at the launching of the last destroyer, Rear Admiral somebody was there and said that it was the highest man-hour production on that class of ship in Canada. That is why I was wondering whether the shipyards in British

Columbia are on a competitive basis, as far as the other major shipyards of the east are concerned.

Mr. GOLDEN: We have looked at this, and it is our view that the productivity of the workmen in British Columbia yards is consistently excellent. Their performance on ship repairs and new construction has been of the highest order. But one of the difficulties that they face is high wage rates and high freight costs. As far as we are concerned, the other points I have mentioned are true, that they are highly regarded in the business, their performance is of the highest order, and their productivity is excellent.

Mr. WINCH: I presume there will be a continuation of policy, as far as your department is concerned, to give a sufficient share, for the maintenance of shipyards, to both east and west?

Mr. GOLDEN: I cannot answer that. All I can say is that at the moment the policy is to allocate some destroyer escorts to the west coast, and they are working on them.

Mr. WINCH: Do not change, or you will be hearing from 22 members in British Columbia.

Mr. McILRAITH: Mr. Chairman, I have just a supplementary question of Mr. Golden. I take it that that is directly related to the policy stated by the minister on page 1—to develop and maintain the production resources needed in Canada to support our defence policy?

Mr. GOLDEN: Yes, sir.

Mr. McILRAITH: And with regard to shipbuilding, that applies in different areas of Canada?

Mr. GOLDEN: Yes.

Mr. CARTER: Mr. Chairman, following a supplementary question along the lines that Mr. Winch asked: when you request tenders for, say, small items, like footwear and that sort of thing, do you request a price delivered on the site?

Mr. GOLDEN: Yes, sir—f.o.b.

Mr. CARTER: That places the provinces who have to add in the cost of transportation in a more difficult position. In other words, that does not give every province a fair chance, because many provinces which have many small factories might be able to compete in price; but when the cost of transportation is added on, that makes it uncompetitive.

I would think that that is a very unfair way of achieving the purpose to which Mr. McIlraith just referred; that is, to develop and maintain the production resources in Canada.

Mr. GOLDEN: That has been looked at, sir. It is true to say that the services have quite a decentralized depot system, and therefore it would not be accurate to suggest that all shipments, for instance, have to be made to Ontario or Quebec, or something like that. A number of shipments are called up from Moncton, for instance—from the depots in Moncton, New Brunswick; from the depots in Ontario and Quebec. And there are depots in the west.

I can only say, in addition, that this matter came up before, and the Department of Defence Production said that this question, and the whole question of further decentralization of depots was under consideration at all times in the Department of National Defence—and I do not think the situation has changed.

The CHAIRMAN: That depot system would more or less balance the f.o.b. angle, would it not?

Mr. GOLDEN: I would not be prepared to say, entirely; but I think it is correct to say that the depot system is such that it does, in many cases, give an advantage to firms which, in other cases, would be at a disadvantage.

Mr. FORGIE: Mr. Chairman, arising out of some of the remarks made by Mr. Golden, there is rather an unfair practice carried on in my section of the country, in north Renfrew, and that is in respect to asking for tenders to supply goods from both wholesale and retail stores in Pembroke. For instance, small stores in Pembroke cannot compete with Loblaws or A & P. I wonder if that situation could not be looked into, for some more satisfactory method.

Mr. GOLDEN: I am not familiar with it, but I will be glad to look into it.

Mr. LAMBERT: Mr. Chairman, referring back to the question raised by Mr. Carter: is it a factor that the Department of National Defence has concentrated their major depots—for instance, the air force has two supply depots, one near Toronto and one at Edmonton, and their call for supplies is f.o.b. those supply depots. But particularly with regard to the army, they have theirs concentrated in Ontario and they have only regional ordnance depots, and the requirements to have it f.o.b. the R.O.D. are rather limited.

I have come across that with respect to a number of western manufacturing firms, who say, "We just cannot put the goods into Ontario, in competition with Ontario and Quebec manufacturers". You have not got control of where the services have their supply depots; but do you think that is a fair appreciation of the situation?

Mr. GOLDEN: There are cases where this could create difficulties, yes; and it is for that reason that, as I understand it, there is still a continuing discussion going on between the two departments, to see whether it would be appropriate to suggest any changes in the depot system—and whether this examination will indicate it is so appropriate to do so, I do not know.

Mr. CARTER: Is there any justification for that? How do you justify that arrangement?

Mr. GOLDEN: I do not justify it, Mr. Carter; it is a matter which is under the control of the Department of National Defence. However, it, of course, is justified on the basis that it is not economical to have a large number of depots unless you have a large number of units, people and services, which have to be serviced from those depots.

Mr. CARTER: I was not referring to that; I mean requiring the goods f.o.b. Why not give everybody a chance to say what they can produce it for, and let the department absorb the transportation costs? That would put everybody on an equal footing.

Mr. GOLDEN: The analyses which we have made indicate that this is the cheapest way of procuring defence supplies. I know that is not a good answer, if it is filled with inequities as a result. However, I am not sure it is.

The CHAIRMAN: Is this under constant consideration?

Mr. GOLDEN: Yes.

Mr. HELLYER: Or, continuing consideration?

The CHAIRMAN: Yes, that is better.

Are there any further questions on the statement?

Mr. CARTER: Before we leave the figures which Mr. Golden gave this morning, I would like to ask if there is an explanation of the uniformity which appears in the figures? For example, for the first three quarters of 1959, the bids requested on the subcontracts—

Mr. GOLDEN: You may not have seen the actual document; there is a note saying that for the first three quarters, we have to average them. That is why I suggested, perhaps, you should have this. For the first three quarters of 1959, we had to average them.

Mr. CARTER: I thought it was a strange coincidence that in three quarters you would get the same figures.



Mr. GOLDEN: There are three explanatory notes on the document.

Mr. McILRAITH: I presume these will be printed in the record?

The CHAIRMAN: Yes.

Mr. GOLDEN: It is being reproduced, with all the explanatory notes, I hope.

The CHAIRMAN: Any further questions on the minister's statement?

Mr. HELLYER: If you are still on the statement, on page 6, reference is made to a new branch called the "planning agency". This is not to be confused with the War Supplies Agency?

I would like to have a long and detailed explanation of what this organization does, and what it has achieved to date.

Mr. GOLDEN: The new branch—Emergency Supply Planning Branch—has only recently been set up in the department.

The recruitment of the officials, with one exception, was completed within the last two months.

It is a planning agency, and there is no suggestion, beforehand, that it will have any responsibilities in war time, or in an emergency. It is to plan the organization which would exercise these functions, and it would be a matter for later determination as to the methods by which the operation would, in fact, be carried out.

It is purely a planning agency, designed to create a framework through which these necessary measures could be taken in the event of an emergency or war.

I am in no position to give a detailed explanation of anything about this agency at the moment, because its planning functions only just have commenced.

Mr. HELLYER: To whom does it report?

Mr. GOLDEN: It reports to me and to the minister.

Mr. HELLYER: It does not report directly to the emergency measures organization?

Mr. GOLDEN: No. There is a cabinet committee, which would have an over-all jurisdiction; but it reports to Mr. O'Hurley, as it is part of the Department of Defence Production.

Mr. HELLYER: Can you tell us what it plans to plan? What I mean is this: is it going to set up a list of things that should be bought, in case of a theoretical war, that would be required, if you knew there was going to be a war, but which there are no plans to acquire.

Mr. GOLDEN: Its planning functions are divided, at the moment, into energy, materials, food, procurement and trade. It will be expected to have ready the plans for an organization which could become effective immediately on the outbreak of war, but it would not, itself, necessarily be the agency which would carry out these functions in war.

Mr. HELLYER: But it has no authority to implement any plans that it might plan to make?

Mr. GOLDEN: That is not its function at the moment, no.

The CHAIRMAN: But it would report its plans to the minister and he, in turn, to the cabinet meeting?

Mr. GOLDEN: Yes.

It is a planning agency, and has no function relating to going out and buying food, stockpiling it, and things of that nature.

Mr. McILRAITH: Or, developing defence equipment, or procurement.

Mr. GOLDEN: No.



Mr. HELLYER: With respect to its energy aspect, what relation has it to the national energy board?

Mr. GOLDEN: I am not sure whether all the interdepartmental agreements have been arrived at as yet. In many cases, they are overlapping, in the sense that more than one department is concerned. In this case, interdepartmental committees are set up. I am not too clear whether Trade and Commerce, the National Energy Board and the energy section of this agency have worked anything out.

The CHAIRMAN: It is difficult at this time to obtain information on this.

Mr. GOLDEN: It has just begun to operate.

Mr. HELLYER: It is not just the departments who are concerned in respect to the overlapping. This is one of the problems, and it comes very close to policy matters. It seems more than incongruous that a planning agency of an emergency nature, to plan for an eventual war, would not be subject to and report to an Emergency Measures Organization, and would be set up for that purpose.

Mr. GOLDEN: Well, the Prime Minister announced last year that this was being done.

Mr. HELLYER: Could you give us any indication of what the war supplies agency does?

The CHAIRMAN: Is that your department?

Mr. GOLDEN: This is what this group is planning for. The War Supplies Agency is what this group is planning and organizing, and trying to prepare for. That is what this group is doing.

Mr. HELLYER: Is the war supplies agency in existence?

Mr. GOLDEN: The War Supplies Agency, presumably, would be that agency which would come into being when the emergency or war occurred.

Mr. HELLYER: But it is not yet in existence?

Mr. GOLDEN: This is the agency which this group now is beginning to plan.

Mr. HELLYER: And is it determined to whom the war supplies agency will report?

Mr. GOLDEN: No.

Mr. HELLYER: Could you indicate, for example, have any plans been made as to stockpiling food, in case of an emergency?

Mr. GOLDEN: I have seen nothing yet, sir. I am not even sure the officials have their telephones in and a desk to work on. We recruited these people through the civil service commission. We now have them, and they are starting to plan and do the tasks assigned to them. I have had no report from them as yet, and I really would not be competent to say that they have done anything that could be looked at.

The CHAIRMAN: It seems to me it is still in a metamorphic stage. It is too bad we are not a year older, and then we could gain some information.

Mr. HELLYER: Yes, but there is still some concern, from time to time, as to whether we will ever be a year older.

Are there any considerations of emergency accommodation for this organization? If they are going to plan what should be done in case of emergency, what plans are there to protect them so that their plans would be protected, in case of an emergency?

The CHAIRMAN: This is still in the metamorphic stage, and I see no reason for pursuing the question.

Mr. Golden has given us all the information he can.

Mr. HELLYER: Does the Department of National Defence have duplicative machinery for planning, in case of national emergency?

Mr. GOLDEN: No sir. I do not know what plans they have for a national emergency. The Department of Defence Production is the only department which has the responsibility for doing the planning which this section is going to be doing—and it is its responsibility. We propose to carry it out. I find myself in this difficulty; I have just obtained my people. I am not sure that I even have met them all yet. The chief is just now preparing for my approval, and for the minister's approval, the methods by which he proposes to execute his responsibilities. I am in the position that I am not sufficiently familiar yet with what he has done.

Mr. HELLYER: Are your terms of reference set by cabinet directive, or how did this come into being?

Was it a directive of the emergency measures organization, from the cabinet, or how did it come to happen?

Mr. GOLDEN: There is a cabinet directive. I do not know whether or not I should answer this. Yes, this is a task which has been assigned to the Department of Defence Production, and to no other department.

The CHAIRMAN: Have you a question on another point, Mr. McIlraith?

Mr. McILRAITH: Just a point of clarification, Mr. Chairman.

In dealing with this agency, and describing it, you spoke about this planning for procurement of supplies. Now, that really is the direct responsibility of the department, as I understand it.

The CHAIRMAN: Which department?

Mr. McILRAITH: Of your department, Mr. Golden, the Department of Defence Production.

Could you make clear to me, is it envisaged that this new planning division about which we are speaking is going to reconsider the whole matter and examine whether the department itself should be replaced by some other procurement agency?

Could you clarify that point?

Mr. GOLDEN: I think what I should have made clear is that it is contemplated that a war supplies agency might have powers, duties and responsibilities, in the early period of a nuclear war, which, indeed, might be very wide—and that would include procurement of commodities—not necessarily military, but all commodities of all types. That is one of the things that the agency is expected to plan for—to indicate how it thinks this should be done. It would not do it.

Mr. McILRAITH: I recognize that point.

Mr. GOLDEN: It might indicate it should be done by the Department of Defence Production.

Mr. McILRAITH: Now, that is the responsibility of the department itself, and the purpose for which it was created. It seems to me that this new planning agency has a responsibility, although it is only a part of the department reporting to the deputy minister and the minister, to recommend a larger agency, and another agency; in other words, the replacement of the present department by another—and that seems to me to be inconsistent.

Could you reconcile that apparent inconsistency of authority?

Mr. GOLDEN: Well, sir, the functions of the Department of Defence Production are to procure defence supplies, materials and services, whereas the war supply agency, it is contemplated, would have the responsibility of procuring on a wider basis.

The CHAIRMAN: On a wider basis?

Mr. GOLDEN: On a much wider basis.

Mr. McILRAITH: I follow that, but that responsibility is being exercised through a branch of a department that reports to the Minister of Defence Production, who has more limited authority.

Mr. GOLDEN: That is true. I have no doubt that is one of the reasons why the responsibility of this planning branch was allocated to the Department of Defence Production, because it already has some similar planning functions laid on it by statute.

Mr. McILRAITH: But the department has a much narrower right acquired by statute?

Mr. GOLDEN: That is right.

Mr. McILRAITH: It has a much narrower right under this new planning subdivision of the department.

Now, that would look like an inconsistency and would raise a question as to what responsibility or governmental authority that new agency should be answerable to. I take it that you would consider that as a matter of policy outside your responsibility as deputy minister.

Mr. GOLDEN: I can only say what I believe the fact to be, and that is that it is responsible to the minister, and the cabinet committee has a coordinating responsibility over that.

Mr. McILRAITH: You see, there is a question arising, Mr. Golden, as to whether or not this agency, or act, is wide enough to permit you to have money provided for the creation of such an agency. I want to be very sure you had the authority.

The CHAIRMAN: The point is that the agency itself is not formed as yet. I do not see how, or why, we can pursue the question in respect of something that is not even in existence.

Mr. McILRAITH: I am pursuing the question in respect of the vote of money.

The CHAIRMAN: Is there any money in these estimates in regard to that agency?

Mr. GOLDEN: Yes, for the first time there is.

Mr. McILRAITH: Oh, yes, and my point was in pursuit of that.

Mr. GOLDEN: There is money, but not for the war supplies agency.

Mr. McILRAITH: I realize that.

The CHAIRMAN: This money is just for the planning agency.

Mr. GOLDEN: The money is just for the planning agency.

Mr. McILRAITH: It is the planning agency that we are asked to vote money for.

Mr. GOLDEN: It is the Emergency Supply Planning Branch of the Department of Defence Production.

Mr. McILRAITH: Yes, that is the branch we are now asking to vote money for, and which we are now examining. There is a question as to whether that branch has a wider authority than the statute gives the department, and I am very anxious that that point should be looked at, so that we will be very sure that the branch does have the required authority to do its work. I think this is an important point.

The CHAIRMAN: Is there enough money included in your estimates this year, for the Emergency Supply Planning Branch to do the job that was proposed for it?

Mr. GOLDEN: Yes.



Mr. McILRAITH: Mr. Chairman, my point is not in regard to whether there is enough money, but if there is the authority for this department to carry out the functions for which we are providing this money.

The CHAIRMAN: Undoubtedly there must be or they would not have had it, I would think.

Mr. McILRAITH: No, no; they make many mistakes in law. They are only human.

Mr. HELLYER: Mr. Chairman, on this very point, the minister himself must have had some apprehension about it because, if you will turn to page 6 you will see that it reads this way, referring to this emergency supply planning branch:

it will thus also have responsibility for co-ordinating those aspects of emergency supply planning that are properly the responsibility of other branches of the Department of Defence Production or of other departments and agencies.

Mr. McILRAITH: Yes, "or of other departments and agencies".

Mr. HELLYER: I would like an explanation in that regard, because here they are saying we are setting up an agency to do the work which is properly the responsibility of other branches of the department, or of other agencies.

The CHAIRMAN: Can you add anything to that, Mr. Golden?

Mr. GOLDEN: Yes, sir. The minister said, "coordinating these aspects". The department is not going to do anything which is already being done in any other department, but we have been given the responsibility of co-ordinating this and doing the planning in those areas where there is now no planning. We are not going to ask for statistics which the Dominion Bureau of Statistics already has, and we are not going to ask for information in respect of industry that the Department of Trade and Commerce already has. That is what the minister meant, I think.

Mr. McILRAITH: Yes, but in such cases it is not usual to have a branch doing that sort of thing and reporting directly through the deputy minister to the minister of the particular department, that is the point I make.

The CHAIRMAN: Are there any further questions gentlemen?

Mr. WINCH: Yes, Mr. Chairman, I would like to ask a question with respect to page 4 of the minister's typewritten statement. At page 4 we have the statement: "On the other hand, heavy gun production in this country has virtually ceased".

The CHAIRMAN: Where is that statement on the page?

Mr. WINCH: It is about half way down the page.

I have not seen any startling reduction in the world in regard to defence expenditure. Why has this been necessary? Has Mr. Golden any information in this regard, and I refer to the fact that heavy gun production has virtually ceased in Canada. Has Mr. Golden any information as to whether or not the plants that were previously producing heavy guns have been adapted in any way for the production of the new type of armament which will be required, because we are still spending the same amount of money? I am interested in the employment situation and the maintaining of those plants.

Mr. GOLDEN: There is only one facility in Canada, at least in recent years, which has been used for the production of heavy guns, and with the exception of some spares, which I believe are still being produced, I do not know of any defence orders in that plant. This plant is not exclusively engaged in defence production work. It does other work. As far as defence



production is concerned, I do not know of any other work going on there with the exception of the production of some spares. I am advised that there are some sub-contracts in that plant, but not direct contracts from the department.

Mr. WEBSTER: Would that be the plant at Sorel?

Mr. GOLDEN: Yes.

Mr. WINCH: I am interested not only in the plants being adapted to produce heavy guns, but I know, for example, during the last war—it was very hush, hush at the time—that the British ordnance established at the Dominion Bridge plant in Vancouver a very well equipped plant for the production at that time of anti-aircraft guns. Do you know of any planning that has taken place in regard to that plant being used for the production of the new type of armament?

Mr. GOLDEN: I would not think so.

Mr. WINCH: I hate to see the expending of hundreds of millions and billions of dollars during an emergency in regard to these plants to carry on defence production, and then not utilizing the capital equipment that has been installed.

Mr. GOLDEN: We certainly have no shortage of defence facilities in this country at the moment, Mr. Winch.

Mr. WINCH: Of course, that is not quite my point. My point is, we do not have a shortage, and because you now have a defence production sharing arrangement, do you visualize the potential use of those plants in regard to your production sharing arrangement with the United States of America and the United Kingdom as well as other countries.

Mr. GOLDEN: Yes, sir. This is one of the main objects of this program. I doubt that it is going to be possible to achieve it in every case. There are some cases where the changing military requirements are such that it is going to be extremely difficult to change some plants. It is perfectly true to say, as you suggest, that one of our purposes is to try and diversify and keep active as many of these plants as we can.

The CHAIRMAN: Are there any other further questions in regard to the minister's statement, gentlemen?

Mr. HELLYER: It is rather ironical to have all these facilities and not be using them for defence equipment production.

Mr. WINCH: There is one logical question which should be asked: whether we will get an answer is another question. It is said at page 4 thereof: "...the decline in the relative importance of traditional armaments...". Does that mean, therefore, perhaps, that we are considering nuclear armaments?

Mr. CARTER: I would like to ask one question, Mr. Chairman.

The CHAIRMAN: Yes, by all means, Mr. Carter.

Mr. CARTER: Is it envisaged that, should an emergency develop, this Emergency Supply Planning Branch would be absorbed by the War Supplies Agency?

Mr. GOLDEN: I really do not know, sir. It might disappear, or it might be absorbed. It would have no real function to perform, presumably. Its personnel might be absorbed. It would be too late at that time to start planning and this agency would disappear unless it had something to do elsewhere.

Mr. HELLYER: It would be too late to start doing anything. I wonder if we should have an emergency committee to coordinate all the emergency committees.

The CHAIRMAN: Can we now turn to page 153 on vote 66? Shall that page carry, gentlemen?

Agreed to.

The CHAIRMAN: We will turn to page 154, still in regard to Departmental Administration. Are there any questions, gentlemen?

Mr. McILRAITH: I would like to ask some questions in regard to crown corporations that are not included here.

The CHAIRMAN: We will reach those at the end of our considerations. I said that yesterday, Mr. McIlraith.

Shall page 154 carry, gentlemen?

Agreed.

The CHAIRMAN: We will turn to page 155, still in regard to Departmental Administration. Are there any questions here, gentlemen? Shall that page carry?

Agreed.

The CHAIRMAN: That concludes our consideration of Vote 66.

Mr. CARTER: May I ask a question in regard to a matter on page 155 of the estimates? I note that you have deducted the salaries of employees of the cloth warehouse. What has happened to this item? Has the cloth warehouse disappeared? It says here: "gross total salaries and wages less salaries of employees of cloth warehouse".

Mr. GOLDEN: The cloth has been turned over to the Department of National Defence, Mr. Carter.

Mr. CARTER: I see.

Item 66, carried.

The CHAIRMAN: Now we will deal with Vote 67.

Item 67. Care, Maintenance and Custody of Standby Defence Plants, Buildings,	
Machine Tools and Production Tooling .....	\$ 400,000

The CHAIRMAN: This item has been reduced from \$882,000 to \$400,000 this year. Are there any questions in this regard, gentlemen?

Mr. GOLDEN: There is a supplementary in that regard, Mr. Chairman.

The CHAIRMAN: All right; I have it here some place. The supplementary items have not been referred to this committee.

Mr. GOLDEN: I thought I had better mention it, because it is not really a reduction.

Mr. HELLYER: What care is being taken of the Iroquois engine tooling? How much is this costing and what do you plan to do with it eventually?

Mr. GOLDEN: One of the main items under this vote is the engine testing arrangements, and that represents over \$200,000 of that vote.

The CHAIRMAN: Are there any other large items in that item, Mr. Golden?

Mr. GOLDEN: Yes, there is a substantial item in connection with the John Inglis company. All the other items are of modest size.

Mr. HELLYER: Is the Iroquois engine jiggs and tooling still intact?

Mr. GOLDEN: Yes.

Mr. HELLYER: What do you intend to do with this?

The CHAIRMAN: Six cents a pound, I imagine.

Mr. WEBSTER: Perhaps it is war assets.

Mr. GOLDEN: I do not think I can answer that question in regard to the intentions, but at the moment it is intact.

Mr. HELLYER: Why do we not cut it up the way we did with the Avro Arrow?

Mr. GOLDEN: There were possibilities that were considered sufficiently interesting to warrant relatively modest expenditures which were required to keep it intact.

Mr. HELLYER: That is a modest understatement.

The CHAIRMAN: Are there any further questions in regard to vote 67, gentlemen?

Mr. HELLYER: I think you might tell the minister that he can prepare a statement in regard to the estimates of this year or next year, because we eventually will want to know what his plans are.

The CHAIRMAN: Mr. McIlraith and gentlemen, vote 68 is for the establishment of production capacity and substantial amounts to capital assistance.

Item 68. For the establishment of production capacity and for capital assistance for the construction acquisition, extension or improvement of capital equipment or works by private contractors engaged in defence contracts, or by Crown Plants operated on a management-free basis, or by Crown Companies under direction of the Minister of Defence Production, subject to the approval of Treasury Board ..... \$ 2,731,500

Mr. WINCH: Mr. Chairman, could we have a policy explanation as to how these capital grants are made. Are they made as grants, or are they recoverable, or are they allowed to have them free; or, if they are recoverable, are they then written off at a high rate of depreciation? Just how does this work?

Mr. GOLDEN: Capital assistance remains the property of the crown; it is not a gift. A number of things may happen to it. In many cases we have subsequently sold it, either to the firm to whom the assistance was originally given, or to someone else. In other cases, we have taken it away from the firm to whom the assistance was granted and put it in storage until it is required on some other occasion.

Mr. WINCH: Do you charge a rental on it, if it is being used, since you own it?

Mr. GOLDEN: If it is being used for non-defence purposes, a rental would be charged: if it is used for defence purposes, normally a rental would not be charged, because it is owned by the crown, and you would be charging yourself.

Mr. WINCH: Is this not done to companies who hold contracts with the crown?

Mr. GOLDEN: If capital assistance is given to a contractor for a defence contract, then no rental would be charged and the equipment remains the property of the crown.

Mr. WINCH: The company cannot, then, include the cost of that machine as part of his contract price?

Mr. GOLDEN: Quite so.

Mr. WINCH: He cannot charge—

Mr. GOLDEN: He cannot charge anything related to that; that is quite right.

Mr. WINCH: And if you decide to sell—as you say you sometimes do—is that done by yourself, or by Crown Assets Disposal?

Mr. GOLDEN: If it is sold as a surplus asset, then it is sold through Crown Assets. In many cases they have been sold, not as surplus assets, they are still required for defence, but the contractor has agreed to buy it. Then we would sell it direct. There have been many cases of this over the years.

Mr. WINCH: What is the basis of sale? In other words, what is the write-off by the crown on that?



Mr. GOLDEN: The basis of most of the sales has been cost price to the crown, less depreciation.

Mr. WINCH: Is there a definite rate of depreciation, according to the machine?

Mr. GOLDEN: Generally, it is on a straight line basis.

Mr. WINCH: I want to try to pin down whether or not there is any correctness in the statements we hear and read quite often, that too often it is a give-away price. I want to make sure it is not a give-away price, that the crown is receiving a proper valuation if it sells, after having put forward all the money itself.

Mr. GOLDEN: It is our belief that there are no give-aways. The principal sales of equipment that have been made over the years aggregate in cost some \$97,471,000; the crown received \$63,586,000.

The CHAIRMAN: That was your total cost, less your depreciation?

Mr. GOLDEN: That is right, sir.

The CHAIRMAN: Are there any further questions on vote 68?

Mr. HELLYER: I wonder if the deputy minister could tell us what is the nature of the assistance to A.V. Roe Ltd. in respect to the Avrocar: is it capital assistance, development grants, or what?

Mr. GOLDEN: There is no capital assistance there.

Mr. HELLYER: There is some type of assistance, though, is there not? I have a newspaper article here, the headline of which reads, "Pushing 'flying saucer'".

What do they mean by "pushing it"? The article says:

The Defence Production Department is putting as much as \$2,500,-000 into Avro's kitty for the development of the "flying saucer".

Mr. GOLDEN: Under another vote there is a somewhat more modest assistance to—

The CHAIRMAN: Could we hold that, then, until we get the proper vote, Mr. Hellyer?

Mr. HELLYER: Under what vote would this come?

Mr. GOLDEN: Vote 71.

The CHAIRMAN: Gentlemen, may vote 68 carry?

Agreed.

The CHAIRMAN: Vote 69 is an increase from \$100,000 to \$129,175 it is grants to municipalities in lieu of taxes. Are there any questions?

Item 69. Grants to municipalities in lieu of taxes on Crown-owned defence plants operated by private contractors .....	\$ 129,175
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Mr. WEBSTER: That is an increase in assessments and valuations, I suppose.

The CHAIRMAN: Are there any further questions?

Agreed.

The CHAIRMAN: Vote 70 is exactly the same as last year. Are there any questions?

Item 70. To establish qualified sources for the production of component parts and materials subject to the approval of Treasury Board and to authorize commitments against future years in the amount of \$1,500,000 .....	\$ 950,000
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Mr. WINCH: What is meant by "strategic components development"?

The CHAIRMAN: You would like an explanation first, Mr. Winch?

Mr. WINCH: Yes, please.



Mr. GOLDEN: The purpose of this vote is to ensure the maximum participation of Canadian firms in defence procurement, to establish qualified sources of supply of component parts and materials sufficiently in advance of Department of National Defence contract demands to lessen the dependence of end-product producers on United States and other sources of supply.

It was recognized that a gap existed between the research and development activities of Defence Research Board and the manufacturer's capability of producing items in quantity consistent with the necessary quality.

The purpose of this vote is to provide these high-quality components which can be purchased by the manufacturers of the end-items for national defence.

Mr. McILRAITH: What is the nature, or the method of handling this vote: is it a grant to the companies concerned, or how is it handled?

Mr. GOLDEN: It is not a grant. It is usually a contract for the manufacture of prototypes, the development of prototypes, or something like that.

In almost all cases the company would put up the capital cost, and we would put up the cost of the first pilot run, or something like that.

Mr. McILRAITH: Your expenditure last year was \$572,000; am I correct?

Mr. GOLDEN: No. I think our expenditure was less than that; the expenditure was actually only \$281,000.

Mr. McILRAITH: I am reading the figure on page 157 of the estimates.

The CHAIRMAN: It says "estimated total".

Mr. GOLDEN: These books are printed—

Mr. McILRAITH: I wanted to clear that up. The actual to December is shown as \$128,000, and the estimate for the balance of the year is \$444,000, making a total of \$572,000. That estimate, then, was too high by a very substantial amount?

Mr. GOLDEN: Oh, yes. It takes a very long time to get these contracts going; there are a lot of people you have to satisfy before you are allowed to spend this money.

Mr. McILRAITH: Coming to this year, 1960-61, do you estimate, at this stage—bearing in mind that the estimate book was published some months ago—that you are going to require all the money?

Mr. GOLDEN: Yes, we still estimate that the full amount is required.

Mr. McILRAITH: Can you indicate to the committee the nature of the components that are assisted under this vote this year?

The CHAIRMAN: Do you mean, the types of developments?

Mr. McILRAITH: Yes—something more substantial.

Mr. GOLDEN: A high power Klystron and TR cell facility—as long as I am not asked to explain some of these—precision electronic ceramic components parts, microwave tubes, actuators, alternators and regulators, accelerometers, fuel pumps, gear boxes, hydraulic controls.

The CHAIRMAN: That gives us a rough idea.

Mr. McILRAITH: How many companies received benefit under this estimate last year?

Mr. GOLDEN: Last year?

Mr. McILRAITH: Yes. Can you give an estimate for this year? Either figure would suit my purpose.

Mr. GOLDEN: About a dozen in this current year, or more.

The CHAIRMAN: It will be all major items, then. Are there any further questions? Shall vote 70 carry?

Agreed.

The CHAIRMAN: Vote 71 is \$5 million: to sustain technological capability in Canadian industry.

Item 71. To sustain technological capability in Canadian industry by supporting selected defence development programs, on terms and conditions approved by Treasury Board, and to authorize commitments against future years in the amount of \$7,000,000 ..... \$ 5,000,000

Mr. WINCH: On research and development, just how do you tie in with the defence research board on that, because it appears to be almost the same, research and development?

How do you explain it, as differentiating between defence production and defence research board?

Mr. GOLDEN: This vote is not intended to cover any item which is of direct interest to the Department of National Defence. Any item of direct interest to the Department of National Defence is funded either by the Defence Research Board or by the particular service concerned.

The purpose of this vote is to assist in sustaining the research and development capability in Canadian industry with which to undertake the sharing of defence development and production tasks with the United States; and the purpose of this vote also is to assist in those cases where there is no direct Canadian military requirement at the moment, but there appear to be reasonable prospects of getting contracts in the future from the United States military services.

Mr. WINCH: Actually, then, it is an investment by your branch, in order to place Canadian industry in a better position of being able to compete for outside contracts?

Mr. GOLDEN: Yes, sir, exactly.

Mr. FORGIE: Mr. Chairman, Mr. Hellyer was asking a question regarding the flying saucer. The report in the press is:

The Defence Production Department is putting as much as \$2,500,000 into Avro's kitty for the development of the "flying saucer".

A departmental executive disclosed the investment was being made in cooperation with A. V. Roe Canada Ltd. and the U.S. Defence Department.

Mr. GOLDEN: There is a contract in contemplation with the company for a much smaller amount than the amount you read, sir.

Mr. FORGIE: This is a newspaper report.

Mr. GOLDEN: I believe we are now in possession of authority to negotiate a contract with the company; but it is for a much smaller amount.

Mr. FORGIE: Have you any idea as to the amount involved?

Mr. GOLDEN: Three hundred thousand dollars.

Mr. WINCH: Have you any money on the Bobcat, under the same vote?

Mr. GOLDEN: The Bobcat is a requirement of the army, and is therefore—at least, the development of it is a requirement of the army, and is not being funded by this vote at all.

Mr. FORGIE: A more dignified name for this would be the Avrocar; is that correct?

Mr. GOLDEN: It is called the Avrocar, yes.

The CHAIRMAN: Are there any further questions on vote 71?

Mr. CARTER: Is the department interested in this Hovercraft that we hear so much about?

Mr. WEBSTER: That is this.

Mr. CARTER: No; that is the flying saucer—that is not the same thing.

Mr. FORGIE: In the newspaper report it says that the Avrocar and the flying saucer are one and the same thing. I do not know whether or not that is correct.

Mr. GOLDEN: They are called that. I do not know what you mean by the Hovercraft there.

Mr. WEBSTER: You mean the machine that hovers around and keeps a cushion of air under it?

Mr. CARTER: Yes, it hovers around and has a cushion of air under it.

Mr. GOLDEN: The Curtis Wright development—we have no contracts.

The CHAIRMAN: May the item carry?

Agreed.

The CHAIRMAN: Vote 72, Crown Companies.

#### B—CROWN COMPANIES

Item 72. Expenses incurred by Defence Construction (1951) Limited in procuring the construction of defence projects on behalf of the Department of National Defence and procuring the construction of such other projects as are approved by Treasury Board ..... \$ 3,876,117

Mr. FORGIE: I have a question on this. It is a question regarding contracts that are entered into by the department for construction. I suppose this might be more properly called under Central Mortgage and Housing. My question refers to contracts regarding construction of houses and buildings in military camps.

Mr. GOLDEN: I have the Chief Engineer, Defence Construction, here; but housing is done by Central Mortgage and Housing Corporation.

The CHAIRMAN: That would not be in here at all.

Mr. FORGIE: I would like to have this question answered, if I may. In the construction of housing around these military camps, is this done under Defence Construction, or is it carried on by Central Mortgage and Housing for the Department of National Defence?

Mr. GOLDEN: Housing is not generally done by Defence Construction; it is done by Central Mortgage and Housing Corporation.

Mr. J. P. STIRLING (*Chief Engineer, Defence Construction (1951) Limited*): Except under special agreement between Central Mortgage and ourselves. Where we have staff on location, and where it is convenient to Central Mortgage for us to call a tender to supervise housing on establishments where we already have staff, we do build houses.

Mr. FORGIE: Construction has a staff at Petawawa, has it not?

Mr. STIRLING: Yes. However, we do not build houses at Petawawa.

Mr. FORGIE: But, you have been supervising the construction of edifices in the Petawawa camp for the Department of National Defence?

Mr. STIRLING: Yes.

Mr. FORGIE: I know how difficult this may be, but is there any way in which a clause could be inserted in these contracts, when they are awarded to the different recipients, that as far as possible the labour employed by these contractors concerned should be taken from the section of the country where the contract is to be performed?

That constitutes a problem. I think there could be collaboration between the Department of Labour, Central Mortgage and Housing Corporation, and the Department of Defence Production on that point.



The CHAIRMAN: Thank you, Mr. Forgie.

Gentlemen, we have only two more votes.

The next vote is vote 73.

Have you a question on vote 72, Mr. McIlraith?

Mr. McILRAITH: I have one general question in connection with crown companies about which I wanted to ask. This has to do with the sale of Polymer Corporation. I understand there is no provision in here for Polymer.

What is the position concerning the continued ownership of Polymer by the crown, through the department?

The CHAIRMAN: What is your question?

Mr. McILRAITH: What is the position concerning the continued ownership of Polymer by the crown, through the department?

Is that a question for the deputy to answer?

Mr. GOLDEN: I do not think I can answer that.

Mr. McILRAITH: Well, if the minister returns, I want to pursue that line of questioning.

Then, on Canadian Arsenals, I have one question.

The CHAIRMAN: That concerns vote 74.

Mr. ROGERS: In so far as the Polymer situation is concerned, has there been any more recent development in the Red Deer area?

Mr. GOLDEN: No.

Mr. ROGERS: No decision has been made?

Mr. GOLDEN: Nothing is going forward on Red Deer at the moment. Item agreed to.

#### CANADIAN ARSENALS LIMITED

Item 73. Administration and Operation .....	\$ 1,349,120
Item 74. Construction, Improvements and Equipment .....	\$ 282,085

Mr. CARTER: There is quite a reduction this year; could Mr. Golden explain that.

Mr. GOLDEN: There is a supplementary. Actually, it is up. It is No. 509—supplementary, \$1,500,000. Actually, it is up.

Mr. McILRAITH: What is the explanation for the increase? What are you procuring?

Mr. GOLDEN: The explanation is that the volume of work at Canadian Arsenals is down.

When the estimates were first drafted, it was contemplated it might be possible to accelerate certain work for one of the services which would give a level of activity at Canadian Arsenals, which would be such that only \$1,349,000 of a subsidy would be required. However, it transpired this acceleration of orders was not possible and, therefore, a supplementary vote was required.

Mr. McILRAITH: What plants of Canadian Arsenals are being kept in operational condition?

Mr. GOLDEN: I do not think any have been closed.

The following plants are still in operation:

- Dominion Arsenal, Quebec City, P.Q.
- Gun Ammunition, Lindsay, Ontario,
- Small Arms, Long Branch, Ontario,
- Filling, St. Paul L'Ermite, P.Q.,
- Explosives, Valleyfield, P.Q.,
- Instrument and Electronics, Scarborough, Ont.

Mr. MCILRAITH: Your problem is a fortunate one in that we are not requiring the work. We are not requiring the ammunition, and they are simply idle for that reason.

Mr. GOLDEN: That is right.

The item is to take account of the fact that the overheads are too great for the volume that is there.

Mr. MCILRAITH: It really represents a reduction in expenditure rather than an increase, as it appears, because, normally, they would be producing ammunition for the Canadian government, in large part, and that would be an estimate of the department of defence.

Mr. GOLDEN: This is going back to the old practice.

Items 73 and 74 agreed to.

The CHAIRMAN: Gentlemen, that concludes our consideration of the estimates of the Department of Defence Production. Thank you very much.

On the recommendation of the steering committee, we will reconvene at 9.30 a.m., Tuesday, if that is satisfactory.

Some Hon. MEMBERS: Agreed.

## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S  
TUESDAY, July 19, 1960.  
(26)

The Special Committee on Defence Expenditures met at 9.30 o'clock a.m. this day. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Halpenny, Hellyer, Kennedy, Lambert, Rogers, Smith (*Calgary South*), Webster, and Winch—10.

*In attendance:* Mr. E. B. Armstrong, Assistant Deputy Minister of National Defence (*Finance*); Mr. R. B. Curry, Director, Emergency Measures Organization; and Mr. D. B. Dwyer, Superintendent, Parliamentary Returns, Department of National Defence.

The Committee resumed from Wednesday, July 13, its consideration of the 1960-61 Estimates of the Department of National Defence.

The Chairman presented the Fifth Report of the Subcommittee on Agenda and Procedure which is as follows:

The Subcommittee on Agenda and Procedure has the honour to present the following as its

### FIFTH REPORT

Your Subcommittee met at 3.30 p.m. on Thursday, July 14, 1960, the Chairman, Mr. G. E. Halpenny, presiding.

*Members present:* Mr. Halpenny, Hon. Paul Hellyer and Messrs. Lambert for Smith (*Calgary South*), Webster and Winch.

Your Subcommittee considered the question of calling outside witnesses in connection with the Committee's consideration of the Estimates of the Department of National Defence.

Following debate, your Subcommittee resolved, on division, to recommend to the Main Committee that no outside witnesses be called in connection with the consideration of the Estimates of the Department of National Defence.

Respectfully submitted,

G. E. HALPENNY,  
*Chairman.*



It was moved by Mr. Lambert, seconded by Mr. Webster, that the Committee concur in the Report of the Subcommittee.

Following debate, the said motion was carried on the following division: YEAS, 6; NAYS, 3.

*On Clause-by-Clause consideration*

On Items 229 to 232 inclusive, Mr. Armstrong was questioned; the said items were severally approved.

On Item 233, Mr. Curry was questioned; the said item was approved.

On Items 234 to 237 inclusive, Mr. Armstrong was questioned; the said items were severally approved.

At 10.45 o'clock a.m. the Committee adjourned until 3.30 o'clock p.m. on Wednesday, July 20, 1960.

Eric H. Jones,  
*Acting Clerk of the Committee.*

## EVIDENCE

TUESDAY, July 19, 1960.  
9.30 a.m.

The CHAIRMAN: Gentlemen, we have a quorum.

Although Mr. Hellyer is not here, he asked a question at our last meeting as to how much of the \$14,216,000, under vote 228, at page 323, provided for development expended on projects performed by industry.

The answer provided by the department is:

It is estimated that approximately \$9,500,000 of the \$14,216,000 provided for development will be expended on projects performed by industry. Some of the larger projects provided for are listed below:

### Tri-Service

Electronic components development projects .....	\$ 225,000
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### Navy

Main gearing design .....	\$ 65,000
Serviceability studies on various equipments .....	\$ 40,000

### Army

Bobcat .....	\$ 644,000
STOL (Short Take-Off & Landing) and VTOL (Vertical Take-Off & Landing) studies .....	\$ 100,000
Vehicular navigational aid .....	\$ 170,000
Improved range of field radio sets .....	\$ 50,000

### RCAF

CF 104 Operational Flight Trainer .....	\$1,800,000
Argus Operational Flight & Tactical Trainer .....	\$2,000,000
CC 106 Operational Flight Trainer .....	\$ 950,000

The CHAIRMAN: Gentlemen, we had a subcommittee meeting.

Your subcommittee considered the question of calling outside witnesses in connection with the committee's consideration of the estimates of the Department of National Defence.

Following debate, your subcommittee resolved, on division, to recommend to the main committee that no outside witnesses be called in connection with the consideration of the estimates of the Department of National Defence.

In attendance at that meeting were Mr. Hellyer; Mr. Lambert, who acted for Mr. Smith; Mr. Webster, Mr. Winch and myself.

Are there any comments, gentlemen?

Mr. WINCH: Mr. Chairman, I just want to say that I am one of those who opposed the recommendation.

There is not much I can say except that I believe it is unfair to the committee, and it is not a proper investigation when you can only hear one point of view and, basically, what might be called only one expert witness.

I feel keenly disappointed at the view the subcommittee has taken. As I registered my objection at the steering committee, I register it again here.

The CHAIRMAN: Thank you, Mr. Winch.

Mr. CARTER: Mr. Chairman, I would like to support what Mr. Winch said, by registering my disappointment that we have taken this course.

We have refrained, to some extent, in our questioning—or, at least, curtailed it—in the hope that it would be possible to have witnesses at the end of our hearings, at which time we could ask further questions.

As Mr. Winch said, if we want to get an over-all view of what our defence policy should be, certainly we want to obtain ideas from all individuals, wherever we can.

I do not think we, as laymen, are in a position to come to a mature judgment, or considered judgment, on these important matters, without getting ideas from people who have a different point of view.

The CHAIRMAN: Mr. Smith.

Mr. SMITH (*Calgary South*): Well, Mr. Chairman, I do not know that there is a great deal I can add.

At one time I felt there might be some advantage, when this committee was in its earlier stages, in calling any person who could offer himself as an expert witness. I think our friend, the official opposition critic, disclosed the real intention of his own party when he suggested the political parties should nominate those people to be called. Throughout his entire examination he has, I suggest, attempted to run a political campaign rather than a constructive examination in this committee.

At one point, he assessed the importance of the committee in terms that we could make a visit to NATO, and then had some difference of opinion on this later.

I suggest there is no object in this committee proceeding to call witnesses on the basis that we are not going to examine defence expenditures, but rather as he has done—attempted to make purely political hay out of the proceedings.

The CHAIRMAN: Have you a comment, Mr. Lambert?

Mr. LAMBERT: Mr. Chairman, I was rather intrigued earlier at the thought we might call witnesses. However, then came the problem whom we should call, and once you call them there arises the question of offering the privilege of rebuttal either one way or the other. It results in a never-ending discussion, and I consider it is practically impossible to be fair to everyone.

After all, the members have available the writings of a number of people who might have been suggested, and they can read their evidence.

I feel this question should not arise at this time. There is a lack of time for the calling of witnesses, and I cannot see where it would be fair, as a matter of fact, if we called former service personnel, the result of whose policies might still be in force, without giving an opportunity to present senior staff officers to expand and elaborate on the position. I just cannot see how you can have an objective appreciation to the calling of these witnesses and, as Mr. Smith indicated, I cannot go along with the suggested formula that the parties name their own witnesses, even though they do it with all the goodwill in the world. If so, I think there would be the feeling that people were advancing views on behalf of a certain political party. Certain of the witnesses who were suggested were American citizens, and we have no guarantee that any witnesses we might ask to come would be prepared to appear.

I might say there has been no restriction on the question of policy. The members of the committee have had complete and free play in this connection. I think it was one of the earlier objectives of the committee that we could go into the matter of policy right to the "nth" degree—and that is what we have done.

Mr. WINCH: Mr. Chairman, may I say that at the last steering committee meeting the question of witnesses being called as nominees of a political party was not discussed.



May I state that I very forwardly put forth the fact that, in my view, it could not be on the basis of representation by parties, but on the potentiality of this committee being able to get advice and opinion.

I object to the inference that was made in regard to our party. It was not discussed at all at the last meeting.

Mr. LAMBERT: I exclude Mr. Winch from participating in the support of any such suggestion that the different political parties name their own nominees.

The CHAIRMAN: Mr. Hellyer?

Mr. HELLYER: Mr. Chairman, it is now perfectly obvious that government members of this committee never had any intention of calling witnesses, and I think it is a very sad commentary on the committee that, in fact, their earlier statements were nothing but vain protestations.

We have had weeks and weeks of interminable lengthy statements from the Minister of National Defence and the examination of his statement.

Mr. SMITH (*Calgary South*): And, equally lengthy statements by the member speaking now!

Mr. HELLYER: Much of the discussion has been merely a sterile examination of information which already was well known. I feel the committee has lost a great opportunity. When the committee was set up, the country was given the impression that we were going to try and do a full, complete and comprehensive job on this, and that we were going to have every possible opportunity to get all the information we could—

The CHAIRMAN: Such as going overseas.

Mr. HELLYER: —on all sides of the question.

Surely there will be time to go overseas shortly.

Mr. WEBSTER: In September.

Mr. HELLYER: Some of the hon. gentlemen have indicated that at the beginning they were intrigued with the idea of calling outside witnesses. I would like to know what it is that has changed their minds. Why do they feel that the evidence and opinions of other people would be less valuable now than it would have been at an earlier stage in our deliberations? I beg them to suggest why they have changed their minds, and what the actual reasons are behind this change.

Personally, in connection with the calling of witnesses, I cannot see that there would be anything to lose, and there would be much to gain. The only reason I put forward the suggestion on the breakdown earlier was to solve the fears of the government members on this committee. Now, certainly, the witnesses I wanted to call are all non-partisan; I think, if they have any politics, they would be supporters of the government—at least, if not all of them, perhaps all but one.

Mr. WEBSTER: Avro engineers?

Mr. HELLYER: And, I think the imputation of motives on the part of one or two members of the committee, although to be expected, and although unparliamentary, are regrettable; because if this committee has been anything, it has been just a whitewash of a confused governmental situation. And, I do not think that we have anything to fear; I do not think the government had anything to fear. If they did, then that is all the more reason why we should have called more people, in order to find out what the facts are, and to find out, to the greatest possible extent, what the expert thinking is in terms of present-day defence technology and that projected for the years immediately ahead.

So, Mr. Chairman, I must state again my objection to this decision of the steering committee. It is what I believe to be a breach of faith, in that the

impression was clearly given earlier that the calling of witnesses was just a matter of time, and that we wanted to do, for reasons of organization, some of the other things first. We wished to commence with the examination of the old accounts, and it was thought this would be a businesslike way of doing things. Well, rather than being businesslike, it has been the opposite; the committee has been given the "business", in that it practically has run out of time, and we still have not had the opportunity of getting down to the job of discussion, which we hoped we would, and which we felt we were promised at the time the committee was set up.

The CHAIRMAN: Have you any comments, Mr. Chambers?

Mr. CHAMBERS: Mr. Chairman, I would like to say that I was in considerable doubt earlier in the sessions of this committee as to whether or not we should call witnesses. However, I am in no doubt at all now—and, particularly, after hearing Mr. Hellyer.

He used one interesting word, and that is the word "facts".

As I understand it, the way committees of the House of Commons have worked in the past is that they call witnesses before them to ascertain the facts, and then the members of the committee, who are sent here for exactly that purpose, resolve the opinions and the ideas from the facts represented to them.

There has been before this committee a complete disclosure of the facts of defence. As far as I can make out, no question that has been asked has remained unanswered. I think there was one exception, of a minor sort, where a question was not answered, on the grounds of security. But we have had a complete disclosure of the facts.

There has been no argument put forward—I was not in the steering committee meeting; but I do not believe any argument was put forward then—to give any support to the idea that these witnesses who are proposed could give us any additional information. They could give opinions. There are probably as many opinions as there are citizens in the country, and it is very difficult to see where we could stop.

The one thing that has come out of this committee is, that in the lengthy statements that have been made, by Mr. Hellyer particularly, there has been no evidence at all of any alternatives being put forward to the present policy. Perhaps it was hoped that some of these witnesses could bring forward alternatives that could not be produced by the members here. Surely, Mr. Chairman, that is not our job: our job is to examine what is being done in defence now, and, in our report, to make such recommendations as we find are a good idea.

It will be very interesting to me to see, when we come to the writing of the report, if Mr. Hellyer has anything constructive to offer. But there has been no evidence that these witnesses could assist us in doing that.

The CHAIRMAN: Mr. Smith?

Mr. SMITH (*Calgary South*): I do not think there is anything on which I want to comment. I was going to make one or two references to Mr. Hellyer's apology; but it hardly seems necessary.

Mr. LAMBERT: Mr. Chairman, to bring the matter to a head, I would move that this committee concur in the recommendation of the steering committee.

Mr. CARTER: Mr. Chairman, I should like to say a further word in respect to Mr. Lambert's and Mr. Chambers' statements.

The CHAIRMAN: Yes, Mr. Carter.

Mr. CARTER: To begin with, regarding Mr. Chambers' statement that witnesses could not produce facts, but merely opinions: we have heard a great

many opinions from the minister himself, and, even if witnesses were brought to give their opinions, they would have to give reasons to support their opinions and we would be in a position to evaluate their opinions, their reasons, and their bases for their judgments against those put forward by the minister.

Mr. Lambert also said that we have had full opportunity to discuss policy. I do not think that is a correct statement. Our discussions have been limited by you, Mr. Chairman, to the items that are listed in the estimates, the actual physical items. That, to me, has been a new principle in the discussion of estimates, because I have never seen it done in the house, in the committee of the whole; and this is the first time I have ever heard of that principle being observed in the committee.

Mr. SMITH (*Calgary South*): That is hardly correct. Under the first you were permitted a general discussion, Mr. Carter.

Mr. CARTER: No, that is not so. We could ask questions on anything we wanted; but the question was put by the chairman: is there any money in this item for this particular equipment, or this particular item? If there was not, then discussion was ruled out. We were not permitted to enquire as to why something else was not substituted for what was being put on the list—and that is a very important part of the examination of government policy, which we are not being allowed to explore at all.

Since we are spending \$1,600 million on defence, and the question of national defence is certainly the biggest question, and perhaps the most difficult that faces parliament and the Canadian people today, I do not think that we have done anything at all to come to any considered judgment, either as to the effectiveness of the present policy or as to what substitute there should be for it.

The CHAIRMAN: Are you seconding Mr. Lambert's motion, Mr. Carter—or have we a seconder for Mr. Lambert's motion?

Mr. WEBSTER: I second the motion.

Mr. SMITH (*Calgary South*): Mr. Chairman, I think it should be pointed out that with respect to your rulings, where specific, physical items were referred to, it is true that the chairman—and I think correctly—kept us to them. But we had a number of statements by the minister which did open up a fairly substantial field for examination. And if Mr. Carter—and, I gather, Mr. Hellyer—feel this has failed, I suggest it is because of the committee's failure, through inability, itself to obtain whatever information it required. Certainly it has not been the circumstance under which we have been permitted to operate.

The CHAIRMAN: Thank you, Mr. Smith. I am not apologizing for what I have done.

Mr. HELLYER: Mr. Smith has raised an interesting point. A few minutes ago we were told there has been a complete disclosure of the facts, which is nonsense.

Mr. SMITH (*Calgary South*): What is your view?

Mr. HELLYER: And now Mr. Smith tells us that if we have failed, it is because of our inability to obtain the information required. This presents an interesting contradiction and, I think, sums up very well the situation which we have encountered.

We have not been able to get a complete disclosure of the facts. After weeks of asking questions, we still do not know what the policy of this government is with respect to the use of atomic warheads.

Mr. SMITH (*Calgary South*): You were so busy offering yourself as a witness that you were not able to listen.



Mr. HELLYER: I thought you were going to call me. You might have learned something.

Mr. SMITH (*Calgary South*): From you?

Mr. HELLYER: We still do not know the government's policy. We know it only has half a policy on defence; but we still do not know whether or not it is going to re-equip its air defence squadrons.

If you look through the evidence, there are at least 20 places where something has come under consideration and the policy has not been made at all clear, and the facts have not been disclosed. As far as Mr. Smith stating that we have not presented an alternative—

Mr. SMITH (*Calgary South*): I made no such remark.

Mr. HELLYER: Mr. Carter put the record straight on that very well when he said that every time we attempted to make even a short statement, merely by way of background information for the purpose of posing a question, the chairman clamped down and imposed a rather rigid strait-jacket on the amount of discussion that was permitted by members of the committee.

Under these circumstances, it has been impossible to have a complete interchange of ideas. Perhaps that was not the function of this committee; but certainly the function of this committee was to obtain as wide a band of information and expert opinion as possible—and that we have not done. We thought we were going to be permitted to do that, and because we have not been permitted to do that we feel that this committee has missed—has failed to accept fully its responsibility to the Canadian people in obtaining, not only the views of the minister and those supporting him, his officials, but from others who might hold the same views. We would be interested to know if they do. Or they might hold contrary views. Certainly we feel that some outside people should have been called.

Mr. SMITH (*Calgary South*): Mr. Chairman, these matters of indecision were matters of indecision when Mr. Hellyer was one of the responsible ministers of the former government. I suggest it might not be a bad idea to call him, to see why these matters were not dealt with earlier.

Mr. WINCH: A plague on both your houses!

The CHAIRMAN: Moved by Mr. Lambert, seconded by Mr. Webster, that the committee concur in the report of the steering committee. Are you ready for the question, gentlemen?

Mr. CHAMBERS: What is the question, Mr. Chairman?

The CHAIRMAN: The question is: all those in favour of Mr. Lambert's motion, would you raise your hand please, so that we can count.

The CLERK OF THE COMMITTEE: Six, sir.

The CHAIRMAN: Contrary, if any, please?

The CLERK OF THE COMMITTEE: Three, sir.

The CHAIRMAN: Thank you. I declare the motion carried. Now will you please turn to page 324, vote 229, Mutual Aid. Are there any questions on mutual aid?

#### MUTUAL AID

Item 229. Contributions to infrastructure and military costs of the North Atlantic Treaty Organization and the transfer of defence equipment and supplies and the provision of services and facilities for defence purposes in accordance with section 3 of The Defence Appropriation Act, 1950, not exceeding a total of \$54,800,000 including the present value of defence equipment or supplies or the cost of services made available by the Canadian Forces estimated in the amount of \$40,000,000 and provided by appropriations for those forces in the current and former years in respect of which, notwithstanding subsection (3) of section 3 of the said Act, no amount shall be charged to this appropriation or paid into a special account Provided by this vote .....

\$14,800,000

Mr. LAMBERT: Yes, Mr. Chairman. Perhaps Mr. Armstrong could give us an appreciation of the relative volume of mutual aid at this time, as against the immediate past, and what might be considered in the future.

Mr. E. B. ARMSTRONG (*Assistant Deputy Minister, (Finance), Department of National Defence*): Mr. Chairman, I do not think I could give an appreciation of what might be the volume of mutual aid in the future. But in terms of the past...

Mr. LAMBERT: Policy.

Mr. ARMSTRONG: As you will note from this vote, the mutual aid is being reduced in 1960-61 from \$90 million to an estimated \$54,800,000. The \$90 million was some \$45 million less than the previous year; and that in itself is less than earlier years, when the amounts were running in the order of \$200 million a year.

In those earlier years there were two, perhaps three, main reasons why the very large volume of mutual aid was necessary. First of all, there was the aircrew training plan which was being applied to all NATO nations. In the first six or seven years following the organization of NATO there were trained—I have forgotten the number—very large numbers of aircrew from the various countries of NATO. Subsequently, as the number of pilots and navigators available reached a point where it was not necessary to continue this training, the countries in NATO developed training facilities of their own. The amount currently in this estimate has been limited to training for Denmark and Norway, with some minor training of navigators for, I think, one other NATO nation.

Mr. SMITH (*Calgary South*): Mr. Chairman, may I ask, if Mr. Lambert is through, a supplementary question on this?

Mr. ARMSTRONG: Perhaps I could just finish the answer. The second reason, of course, was this: early in the program there was a very large volume of equipment transferred to NATO nations to assist in the build-up of the forces with equipment that was held by the Canadian forces at that time, and subsequently replaced.

Thirdly, in the early years there were a number of contracts providing specifically for mutual aid to assist NATO partners and which, at the same time, assisted in the build-up of the defence industry in Canada. This period has now passed. The NATO countries themselves have reached a point where the requirement for equipment is not so urgent as it was; and, of course, the Canadian forces do not, at this point, have large volumes of equipment that they themselves can transfer to NATO nations. Consequently, this vote has gradually declined.

The CHAIRMAN: Mr. Smith, you had a supplementary question.

Mr. SMITH (*Calgary South*): I wonder if I may ask Mr. Armstrong a question—which he may prefer the minister to reply to—and it is this: has the United Kingdom any training services under NATO, in Canada, for aircrews?

Mr. ARMSTRONG: You are speaking of currently, whether or not they have?

Mr. SMITH (*Calgary South*): Yes.

Mr. ARMSTRONG: To my knowledge, they have not requested any training under our facilities. There has been some discussion of a general nature with respect to training in Canada.

Mr. SMITH (*Calgary South*): May I ask if Mr. Armstrong is aware of our reaction to these representations?

Mr. Chairman, the committee has, I think, established the fact that the former agreement under NATO was not a terribly satisfactory agreement, from the financial standpoint, to Canada, although it was a very important contribu-

tion that we made. What I am interested in is this: if we are considering any basis under which any country, whether it be the United Kingdom or any member of the alliance, will have its people trained within Canada, is it correct to assume that it would be on a totally different financial basis than the previous agreement?

Mr. ARMSTRONG: Yes, I think that is correct, with the exception of the NATO aircrew training that we are doing now. Any additional training would involve the negotiation of a different type of agreement.

Mr. SMITH (*Calgary South*): That is satisfactory, Mr. Armstrong.

Mr. WINCH: On the item of \$35 million for Transfer to NATO Countries of Equipment from Service Stocks, may I ask what equipment is intended be transferred under this vote, and to what countries?

Mr. ARMSTRONG: I am not in a position to tell you to what countries. The procedure which applies normally in respect of this equipment is that we seek the recommendation of the standing group of NATO as to the desirable NATO country to allocate the equipment to. That is done following the establishment of the estimates at the beginning of the year; and we normally do not get their recommendation back until some time in the fall, I can tell you, however, the type of equipment included in this program. The single large item in the program comprises the CS2F aircraft; there are seventeen of those and they have an estimated value of \$23,500,000. The remaining items are in number of items which are fairly small in nature: equipment for 40mm anti-aircraft guns, some 30 calibre Browning machine guns, some 3.5 rocket launchers, some 60mm mortars, some 81mm mortars, anti-personnel mines, 90mm shells, some electronic equipment, certain transmitters and converters for transmitters, some 16½ pound bombs, 8½ pound practice bombs; then there is spare support for the aircraft, for some of the aircraft that have been transferred in previous programs—the F-86 Sabres which were transferred to Greece and Turkey, and also spare support for the T-33 aircraft transferred in a previous program.

Mr. WINCH: On what basis is equipment which is obsolete to Canada not obsolete to the partners in NATO?

Mr. SMITH (*Calgary South*): Are there some training aircraft in here?

Mr. ARMSTRONG: No training aircraft. It is spare support for training aircraft. Let me put it this way, if we go back and look at one or two of the items I mentioned, for instance, the spare support for the aircraft which have been transferred to Greece and Turkey, these Sabre aircraft were transferred some years ago and they were an older mark than the aircraft now being flown by the Canadian airforce in Europe. As new models of the aircraft came in it was possible and desirable in the build-up of our NATO allies to transfer the earlier aircraft which were not obsolete to our NATO partners. This applies, for example, to the CS2F Tracker aircraft, which is a modern aircraft and still coming into service with the Canadian navy. So we are using it in Canada and also are transferring these seventeen aircraft to our NATO partners.

Mr. SMITH (*Calgary South*): In respect of the NATO training aircraft could I ask if you are aware of any decision which might involve replacing piston driven aircraft with the jet trainer.

Mr. ARMSTRONG: This question is under continuing study but no decision has been taken as to replacement.

The CHAIRMAN: Are there any further questions on mutual aid?

Mr. CARTER: What is the basis of these contributions? Are they based on requests from the NATO countries or are they based on what we can spare from our surplus stocks? How is it arrived at?

Mr. ARMSTRONG: This is a question of mutual assistance. Canada endeavours to make available those things which fit in with its own program here if it has



equipment which it can make available which is not required for its own force, which would support its own Canadian industry, and at the same time would assist its NATO partners in Europe with equipment offered as mutual aid. The NATO secretariat and the NATO military authorities are aware of the general nature of the equipment which is desirable, but in the final analysis the list of equipment is determined by Canada, offered to NATO, and then the recommendation of the NATO authorities as to the allocation of the equipment is submitted to the government for decision. I think invariably the government accepts the recommendation for allocation purposes.

Mr. CARTER: Canada makes known what stock it has available for this purpose?

Mr. ARMSTRONG: Yes.

Mr. CARTER: On the basis that one of the various countries may require it?

Mr. ARMSTRONG: Then the standing group, or whatever other NATO authority, makes the decision.

The CHAIRMAN: It acts as a clearing house.

Mr. ARMSTRONG: Yes.

Mr. CARTER: Do you base the value of this equipment on the initial cost price, do you take the depreciation into account, or how do you arrive at this particular figure? How do you place a value on the equipment?

Mr. ARMSTRONG: As you perhaps know, the act which governs the granting of mutual aid provides that the equipment will be valued at its estimated present value. In respect of equipment that is not in current manufacture there is an estimate made and it averages out, as a general rule, at about 25 per cent of its original cost. Now, that 25 per cent, of course, includes whatever cost there may be in repairing, packaging, and so on, for transfer to a European NATO country.

Mr. CARTER: As a rough and ready rule it is 25 per cent of the original cost?

Mr. ARMSTRONG: Yes; this is the average.

Mr. CARTER: And it is not the replacement value?

Mr. ARMSTRONG: No.

Mr. ROGERS: Mr. Armstrong, it will be observed that air crew training is down about \$3 million. I have been given to understand that this is going to be increased at Penhold; that seems to be the impression in the area. Is there anything being done?

Mr. ARMSTRONG: I am afraid I could not answer specifically in respect of Penhold in terms of the mutual aid program. It is reduced slightly because the number of people being trained is somewhat lower than in the past. We now are training air crew only for Norway and Denmark.

Mr. ROGERS: They have an emergency field there which has been under lease, but the lease has been cancelled this year.

Mr. ARMSTRONG: Yes. I can get you the answer. I do not know specifically whether or not there is any intention to increase training at Penhold or have some other activity. I do not know offhand.

Mr. SMITH (*Calgary South*): Mr. Rogers brings up an interesting point. You have mentioned the discussions which have taken place with the United Kingdom and conceivably other countries to enter into a new training program under NATO. I merely mention the possibility of it. Yet, in many instances, we are closing up a number of fields which could be used under such a circumstance. Some only are kept under what is described as "care and maintenance". As I understand it, "care and maintenance" does not look after the maintenance of the runways, and certainly not the buildings. Some of it is purely for storage.

I wonder whether we are keeping enough of these air fields available in the event we may run into an extension of NATO.

Mr. ARMSTRONG: I may have caused some misunderstanding in respect of the United Kingdom. That has not been a NATO sponsored inquiry. The United Kingdom has made some inquiries of Canada and there has been some discussion in respect of this.

The CHAIRMAN: I think the results of those discussions are in the evidence. Are there any further questions on mutual aid?

Item agreed to.

#### NATIONAL DEFENCE GENERAL

Item 230. To authorize, notwithstanding section 30 of the Financial Administration Act, and subject to allotment by the Treasury Board, total commitments of \$2,950,656,748 for the purposes of the foregoing votes relating to National Defence, regardless of the year in which such commitments will come in course of payment (of which it is estimated that \$1,420,466,950 will come due for payment in future years) ..... \$1

Mr. LAMBERT: May we have an explanation in connection with this item?

Mr. ARMSTRONG: I take it you are interested in knowing why this item is here.

Mr. LAMBERT: Yes.

Mr. ARMSTRONG: The defence program is subject to a limitation which is imposed by this item as to the total commitments, or obligations if you would like to call them that, that they may enter into. This was always incorporated as part of the defence vote before we broke it down into a number of votes. When it was broken down into a number of votes, rather than repeat this wording in every single vote it was decided as a matter of simplicity to provide a single vote which provides that commitment authorization in respect of all of the votes. Under this arrangement the allocation of the commitment authority is subject, of course, as noted in the vote, to approval of the treasury board.

The CHAIRMAN: May the item carry?

Mr. HELLYER: Not yet, Mr. Chairman. I wonder if we could be advised what is the breakdown of the advance commitments proposed?

Mr. ARMSTRONG: Perhaps I might explain, Mr. Chairman, that this commitment authority covers all items in the program. In the various items that have been mentioned for which there has been cash provided in the estimates there is also a commitment authority, so there is a certain, or in fact complete, duplication going over the list of items covered for commitment authority. However, I could provide some of the main items. Will that be helpful?

The CHAIRMAN: I think that would be satisfactory.

Mr. HELLYER: I think so, Mr. Chairman.

Mr. ARMSTRONG: If we start out with the navy, the total commitment authority provides for the destroyer escorts which we mentioned earlier in terms of a cash provision, is for \$115 million, the tanker supply ship at \$15,875,000, the CS2F tracker—the program which is just about complete—at \$2,565,000; there are in addition certain modifications to that airplane and the commitment authority for that is \$1,300,000. The commitment authority for various types of vehicles under the navy program amounts to \$1,086,000. Under the armament program there is a total commitment authorization of just over \$28 million. The largest single item in that covers anti-submarine torpedoes; there is \$16,000,000 for that purpose.

Mr. HELLYER: \$16 million for anti-submarine torpedoes?

Mr. ARMSTRONG: Yes.

The electronics program has roughly \$35 million in commitment authority. The biggest items are sonar equipment, including variable depth sonar, which totals about \$13 million.

There is commitment authority on various types of ammunition running to approximately \$16 million.

Mr. HELLYER: This is still navy?

Mr. ARMSTRONG: Yes.

Mr. HELLYER: \$16 million for transportation?

Mr. ARMSTRONG: No; ammunition.

In the army, for the various types of vehicles, there is a commitment authority of approximately \$7 million.

Mr. HELLYER: What vehicles would be included in the \$7 million.

Mr. ARMSTRONG: Some are kits for vehicles; that is, the special kits put in vehicles, and there is \$1,700,000; the various types of trailers—water trailers, \$920,000; 1½-ton panel trucks, \$500,000; various tractors, \$500,000, and a number of other miscellaneous items.

In connection with the armament equipment, there is roughly \$9 million in the army commitment authority. That, again, covers items which I think for the most part, have been mentioned as you have been going through the cash estimates.

In connection with electronic equipment, there is approximately \$23 million. The largest single item is the C-42 wireless set, on which the total is about \$11 million.

In connection with ammunition, there is approximately \$36 million. The largest items are the 22 pounder gun, in the amount of \$8 million, and the ammunition for the 7.62 rifle and the light machine gun, in the amount of about \$7½ million.

Mr. HELLYER: Is there no commitment in respect to the Honest John missile?

Mr. ARMSTRONG: I have not it specifically listed.

I might explain to the committee that in this commitment authorization there is some provision that enables a transfer of commitment authority from the main vote to the army to take care of an item such as the Honest John, to provide for orders being placed this year. However, I do not happen to have it on the list here.

In connection with the air force, the 104, \$420 million approximately.

Mr. HELLYER: What was that?

Mr. ARMSTRONG: \$420 million.

Mr. HELLYER: \$420 million; that is just for the CF-104, is it?

Mr. ARMSTRONG: That is for the 104. For the Angus, there is approximately \$7½ million; the 106, which is the long-range transport, approximately \$38 million; the Otter, \$2¼ million; the Albatross, which is the SA-16B search and rescue airplane, roughly \$7 million, and various other items of about \$7 million.

The CHAIRMAN: Is that satisfactory, Mr. Hellyer?

Mr. HELLYER: Yes. What is the total future commitment there in respect to the SAGE Bomarc system? Do you have it broken down separately?

Mr. ARMSTRONG: That comes under construction. The total program is estimated at roughly \$120 million. We have \$21 million, I think, in this year's estimates, so that the future years' commitment authority in this respect would be in the order of \$80 million to \$100 million—somewhere in that bracket.

The CHAIRMAN: Was that not in the white paper?

Mr. ARMSTRONG: Yes, I believe it is; I am trying to find it.

Mr. HELLYER: Mr. Chairman, I think this very impressive list of future commitments reinforces our argument for a re-statement of the definition of government policy in respect to defence matters. There is a great deal of equipment which is just tied to particular usages.



The CHAIRMAN: Is this going to be a question?

Mr. HELLYER: It might wind up that way.

Mr. SMITH (*Calgary South*): Well, that will be quite a change.

Mr. HELLYER: Thank you, Mr. Smith. You are extremely complimentary this morning.

The CHAIRMAN: Well, keep it straight.

Mr. HELLYER: For example, there is approximately three-quarters of a billion dollars for equipment which, if it is to reach its full effectiveness, has to be armed with atomic weapons of some kind or other. This includes navy equipment, air force—the 104, the SAGE Bomarc system, and so on.

Now I think it is too much for the government to ask parliament to vote not only the amount of money we are being asked to vote for this year, but also to commit the Canadian people to this continuing very substantial expenditure unless we have a much more forthright disclosure of what the government's policy is.

I would not expect the deputy minister to comment on this. However, I think it is unfortunate that the minister himself is not here this morning. I think he should come to the committee of the whole house and be prepared to state categorically what the government's policy will be in respect to the navy, and whether it will eventually be equipped with atomic weapons; also, what the justification is for continuing with these destroyer escorts and the tanker program at a time when it is obvious to everyone they will not be able to deal with contemporary equipment.

The CHAIRMAN: Mr. Hellyer, we have been through this about five times. Do you have any further questions?

Mr. HELLYER: Yes, I have a question but, unfortunately, the deputy minister is not the one to answer it.

The CHAIRMAN: Well, the minister could not be here this morning; he had an important cabinet meeting which he had to attend.

Mr. HELLYER: Why should this committee be asked to approve expenditures and commitments involving hundreds of millions of dollars when the government policy, in respect to their effectiveness, has not been decided upon?

The CHAIRMAN: You would not expect the deputy minister to answer that question.

Mr. HELLYER: No, and I said so.

The CHAIRMAN: Have you any questions for the deputy minister on this item, or may it carry?

Mr. WINCH: On the understanding it can be discussed under first item when the minister is here?

The CHAIRMAN: Yes.

Item agreed to.

#### GENERAL SERVICES

Item 231. Grants to Military Associations, Institutes and Others as detailed in the	
Estimates .....	\$223,795

Mr. CARTER: Why the 10 per cent decrease in this?

The CHAIRMAN: Wait until I explain it.

Item 231 starts at the bottom of page 324, continues the full page of 325, and goes to the first paragraph of page 326, and a total of \$223,795 is there shown.

Then, vote 232 is the grant of \$1,600,000—if you wish to mark it in your book; and the Grants to the Provinces and Municipalities for Civil Defence and Related Purposes in the amount of \$4 million, is vote 233. Then the next

is grant to assist in the construction of the Soldiers' Memorial Hospital at Middleton, N.S., and is vote 234. Pensions and Other Benefits is vote 235. Vote 236 covers Payments to Dependents. We will revert to vote 231.

Mr. SMITH (*Calgary South*): Mr. Chairman, Mr. Carter asked the reason for the 10 per cent cut, and I have a supplementary question to that.

Mr. Armstrong, do any of these organizations demonstrate to you, or to your department, a need? I know that some do. I recognize some of them. If I may make a comparison to another committee, which also has the responsibility of making grants, I might say that we were led to believe that much of the grant system is historical in the sense it has been going on for a period of time.

Do you receive the fullest representations from these individual groups to show their requirements, or is it all, by and large, put in the estimates each year and then, perhaps, this year, cut back 10 per cent across the board?

Mr. ARMSTRONG: Well, as you have said yourself, it is true that these items have gone along at the same level for a good number of years. They are substantiated. With respect to most of these, the army is concerned, and the army administration branch. However, they do receive from the various associations statements of the expenditures that they incur.

The reduction in these items represents 10 per cent in respect to the grants to the rifle associations and the united services institutes and others, and there is a one-third reduction in the military service associations.

These reductions have been made as an economy measure, with the object of having these associations administer their various activities on a somewhat less expensive basis than in the past.

Mr. SMITH (*Calgary South*): Well, let me put it another way. Naturally, I do not disapprove of effecting economies, but I am wondering if it is not preferable to weigh the values.

Mr. HELLYER: Well, ask the question.

Mr. SMITH (*Calgary South*): I am.

I am asking if it would not be better to weigh these in relation to the value received.

There are a number of cadet institutes which are producing youngsters in the armed service, and some, undoubtedly, are making a contribution. However, I am wondering if this policy of making a percentage cut across the board is continued, it is not going to discriminate toward a great many of these organizations which make a substantial contribution to the armed services? I am wondering if a review as to the benefit received should not be made.

Mr. ARMSTRONG: I hope it will not result in any discrimination. Naturally, in the event that any of these organizations find themselves in very difficult situations, they will come back to the department and present their argument for increasing the amount.

Mr. CARTER: I asked originally why the 10 per cent cut, and I still do not know why it was reduced 10 per cent across the board.

Mr. ARMSTRONG: I think I said it very simply; they have been reduced as an economy measure.

Mr. CARTER: I see. The government decided to do it, and there was no basis for it except the government wanted it cut down by 10 per cent.

Mr. ARMSTRONG: Perhaps that is not entirely the correct way to put it. These organizations, and the activities they undertake, are regarded as being very valuable but, in the general priorities in the defence picture, it was decided that a 10 per cent reduction should be made in these grants. This has

been discussed with the various organizations, and they have been asked to endeavour to fit their activities within these revised grants.

Mr. SMITH (*Calgary South*): I would like to ask Mr. Armstrong if, at least, he would give consideration, in looking at these grants in the future, to reviewing them based on the need of the organization; and also, what other public funds are being obtained by these organizations because, in many instances, the organizations concerned are, in themselves, collecting revenues to help themselves, whereas some others are somewhat dependent entirely on a dominion or federal grant.

Mr. ARMSTRONG: Yes, I appreciate that. I think I could assure you that those factors will be taken into consideration in the review.

Mr. CARTER: With respect to the military service associations, some of them have been cut by 30 per cent.

Mr. ARMSTRONG: As I mentioned, with respect to the military services associations, the reduction is one-third. That reduction, while the estimate in 1959-60 was for, in all \$68,400, which has been the level of the grants for some years, in fact this reduction was made in 1959-60 and carried on into 1960-61.

The CHAIRMAN: So that the actual expenditure in 1959-60—

Mr. ARMSTRONG: The actual expenditure in 1959-60 conformed with the estimate of—

The CHAIRMAN: \$68,400?

Mr. ARMSTRONG: That is right.

Mr. CARTER: How much money has the government saved by that economy?

Mr. ARMSTRONG: Just the difference between those two items.

The CHAIRMAN: Under Military Service Associations, from \$68,400 down to \$45,600.

Mr. ARMSTRONG: \$23,000.

Mr. CARTER: \$23,000; and \$10,000 on the other one—that is \$33,000.

The CHAIRMAN: And on the next page, the total of \$259,000, down to \$223,795. May the item carry, gentlemen?

Item agreed to.

The CHAIRMAN: Now vote 232, which is a grant of \$1,600,000—which is slightly less than last year—for Gagetown. Are there any question, gentlemen? May the item carry?

Item 232. Grants to the Town of Oromocto, subject to the approval of Treasury Board, for municipal services including the maintenance and operation of schools and to promote the development of the Town ..... \$ 1,600,000

Item agreed to.

The CHAIRMAN: Vote 233, grants to provinces and municipalities for civil defence and related purposes, \$4 million. We have Mr. Curry here, the director of the Emergency Measures Organization, if you would like to ask him any questions on this—should there be any questions.

Item 233. Grants to Provinces and Municipalities for Civil Defence and Related Purposes (formerly provided under Department of National Health and Welfare—comparable amount in 1959-60, \$2,000,000) ..... \$ 4,000,000

Mr. LAMBERT: It is a new item, is it not?

Mr. ARMSTRONG: This is a new item, yes.

The CHAIRMAN: Are there any questions, gentlemen? We had this in the estimates committee.

Mr. HELLYER: Mr. Curry, according to the paper this morning, Professor Parkinson has suggested that the defence of Ontario cut out these civil defence



expenditures, and this would be, presumably, on the basis that in his estimation the coordination of the federal authorities is so weak and ineffective that the provincial expenditures are futile and wasteful. Do you have any comments to make?

Mr. CHAMBERS: Order! That is not the kind of question to address to Mr. Curry, and Mr. Hellyer knows it.

Mr. SMITH (*Calgary South*): Pure opinion.

Mr. CHAMBERS: He is just taking the opportunity, again, of making a statement, based on nothing else.

Mr. SMITH (*Calgary South*): That is right.

The CHAIRMAN: Are there any other questions?

Mr. ROGERS: Mr. Chairman, I should like to find out how it is broken down by provinces. Is there any breakdown?

Mr. R. B. CURRY (*Director, Emergency Measures Organization, Privy Council Office*): Mr. Chairman, the item of \$4 million represents an increase over the last year of \$2 million; and the item is broken down with a first allocation to provinces based on the population, as of the 1956 census, at 25 cents per head, per capita. That is a first allocation.

If provinces have spent, or propose to spend considerable amounts of money in excess of that allocation, they may have a second cut at unallocated funds after July 1 in any fiscal year, and it would appear that one or more of the provinces may well get further funds this year beyond the amount that was first allocated.

Mr. SMITH (*Calgary South*): Mr. Curry, you have spoken, in another committee, on differences between the intensity of the training within each province. I wonder if you can report anything more to us; whether or not there is any more uniformity in the standard of training between the various Canadian provinces.

Mr. CURRY: I think, Mr. Chairman, Mr. Smith's question perhaps relates, not just to training, but to the whole civil defence program within the provinces.

Mr. SMITH (*Calgary South*): If that question is permitted by the chair, I would like a reply to it, Mr. Curry.

Mr. CURRY: I have certainly seen, Mr. Chairman, in the course of the last months—the last year, shall I say—a very marked pick-up in the enthusiasm and degree of activity in a number of provinces, in addition to those provinces that were already showing very considerable footing in this area in earlier years.

Mr. SMITH (*Calgary South*): The answer, then, is yes?

Mr. CURRY: The answer is yes.

The CHAIRMAN: Are there any further questions of Mr. Curry?

Mr. HELLYER: Does this vote include any part of the cost of the provision of siren safety in the city of Toronto?

Mr. CURRY: The siren safety is now carried by the Department of National Defence, through the Canadian army.

The CHAIRMAN: Are there any further questions? May the item carry?

Item agreed to.

The CHAIRMAN: Thank you, Mr. Curry. Vote 234, grants of \$65,000 to assist in the construction of the soldiers' memorial hospital, Middleton. Are there any questions?

Item 234. Grants to assist in the construction of the Soldiers' Memorial Hospital at Middleton, N.S., in a total amount of \$135,588 subject to such terms and conditions as are approved by Treasury Board; amount required for 1960-61 \$ 65,000

Mr. LAMBERT: Is this an operational grant? Is this a grant towards the cost of operation of this hospital?

Mr. ARMSTRONG: No; this is a grant towards construction: it has nothing to do with the operation of the hospital.

Mr. WEBSTER: It is not recurring?

Mr. ARMSTRONG: It is not recurring, no.

The CHAIRMAN: Are there any further questions? Shall the item carry?

Item agreed to.

The CHAIRMAN: Vote 235, civil pensions and other benefits. Are there any questions, gentlemen—or may it carry?

#### PENSIONS AND OTHER BENEFITS

Item 235. Civil Pensions, as detailed in the Estimates .....	\$	2,457
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Item agreed to.

The CHAIRMAN: Vote 236, payments in respect of members of the Royal Canadian Air Force killed while on leave as instructors. Are there any questions, gentlemen?

Item 236. To authorize in respect of members of the Royal Canadian Air Force on leave without pay and serving as instructors with civilian training organizations operating under the British Commonwealth Air Training Plan who were killed, payment to their dependents of amounts equal to the amount such dependents would have received under the Pension Act, as amended, had such service as instructors been military service in the armed forces of Canada, less the value of any benefits received by such dependents under insurance contracts which were effected on the lives of such members of the Royal Canadian Air Force by or at the expense of the civilian organizations .....	\$	3,840
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Mr. HELLYER: Are those continuing in respect to instructors killed during World War II?

Mr. ARMSTRONG: These all apply to World War II instructors.

Mr. HELLYER: That is the only time R.C.A.F. officers were given leave to—

Mr. ARMSTRONG: That is right. These were men who were employed as civilian instructors. This vote brings their pension in line with the provisions of the Pensions Act which were made subsequently.

The CHAIRMAN: The next item, payments under Parts 1-4, is statutory. Vote 237 is government's contribution to the Permanent Services Pension Account, from \$51,791,054, up to \$53,279,356. Are there any questions?

Item 237. Government's contribution to the Permanent Services Pension Account	\$53,279,356
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Mr. LAMBERT: Is the pattern that it is an increasing one?

Mr. ARMSTRONG: The government contribution to the pension account is 10 per cent; it is one and two-thirds of the contribution made by the contributor. Consequently, it changes in line with the total pay and allowance bill, and therefore it has tended to go up somewhat.

Mr. SMITH (*Calgary South*): What does this amount actually apply to?

Mr. ARMSTRONG: This is what is known as part 5 of the Long Service Pension Act for members of the forces. All the members of the forces who joined after 1947 are under that part of the act—and others may elect to be under it.

Mr. SMITH (*Calgary South*): Is there not a difference between the services in this respect, Mr. Armstrong, in that there was a period in which an R.C.A.F. member was not permitted to have the status of regular service, differentiated from the other two services, because for a period of a number of years there was no such status which he could obtain? Otherwise, with the R.C.A.F. there was a period which elapsed before he could apply for a permanent commission, or permanent service as another rank?

Is this not the case purely with the R.C.A.F., and consequently have you not had a number of complaints from people who argue that there was some discrimination in as far as R.C.A.F. personnel are concerned, and therefore they could not receive the full pension rate because their status could not be confirmed as permanent?

Mr. ARMSTRONG: Not to my knowledge. I do not know of any discrimination that applies to the R.C.A.F.

Mr. SMITH (*Calgary South*): I will take the matter up with you personally.

Mr. ARMSTRONG: I do not think there is.

Mr. CARTER: As a matter of interest, if we are coming to the end of this, I would just like to ask one question on vote 235, about how long these civil pensions have been at this figure.

The CHAIRMAN: \$2,457, vote 235, under Pensions and Other Benefits?

Mr. CARTER: Yes. How long have those very small pensions been at this figure?

Mr. ARMSTRONG: These are the individual pensions.

Mr. CARTER: How long have they been at that figure?

Mr. ARMSTRONG: They have been at that figure for a good many years, with a few exceptions. They were all reviewed, when provision was made for supplementing certain pensions. The pension for Mrs. Nixon was increased because the terms under which that pension was granted were such that she would qualify under the general legislation for an increase in her pension.

The other pensions are all in respect of disability. They have been reviewed also; but there has been no ground for increasing them, in that under the application of the legislation under which these pensions were calculated, it would not provide for an increase.

In other words, we have attempted to keep this in line with what would have happened had they in fact qualified for a pension under whatever legislation the calculation was made. If it was a Workmen's Compensation Act matter and if the person granted that pension would have got an increase since then, an increase would have been granted here. So these have all been reviewed from that point of view, and I think the only one that was increased was Mrs. Nixon's.

Mr. CARTER: The only one that was eligible under legislation for an increase would be Mrs. Nixon? Are you satisfied that the others do not need this pension, that they have other means of social income? Are they on some public relief of some kind?

Mr. ARMSTRONG: Frankly, I cannot answer that: I do not know myself. I think a good many of them would be eligible for old age pension. These have been in force for a long time.

Mr. CARTER: And they would get this, in addition to that?

Mr. ARMSTRONG: Yes.

The CHAIRMAN: Are there any further questions on item 237?

Mr. HELLYER: Mr. Chairman, I wonder if the deputy minister could tell us if the defence services pension fund is actuarially sound; and, if it is not, if there is any estimation of the amount that would be required to put it so?

Mr. ARMSTRONG: There was an actuarial evaluation of the pension fund some two years ago. There is a deficit in the fund. I do not remember it offhand; but the amount is shown in the public accounts. It is credited in the account. It has not actually been made up; but the interest is paid on the full amount of the liability.

Mr. CARTER: The government pays the interest on the full amount of the liability?



Mr. ARMSTRONG: That is right.

The CHAIRMAN: Are there any further questions?

Item agreed to.

The CHAIRMAN: Tomorrow afternoon the minister will be here, and we will try to close the first item if we can. Then we go on to our report. Would each one of you who has any item that you would like to have considered for the report please put it in writing and let me have it in my office?

I think this might be a good time to break off. Is that agreeable?

Mr. HELLYER: When are we meeting again—tomorrow afternoon?

The CHAIRMAN: Tomorrow afternoon, at 3.30. Thank you very much, gentlemen.

ORDERS OF REFERENCE

HOUSE OF COMMONS,  
TUESDAY, July 19, 1960.

*Ordered*,— That the name of Mr. Fairfield be substituted for that of Mr. Morton on the Special Committee on Defence Expenditures.

WEDNESDAY, July 20, 1960.

*Ordered*,—That the name of Mr. Roberge be substituted for that of Mr. McIlraith on the Special Committee on Defence Expenditures.

Attest

L.-J. RAYMOND,  
*Clerk of the House.*





## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S

WEDNESDAY, July 20, 1960.

(27)

The Special Committee on Defence Expenditures met at 3.30 o'clock p.m. this day. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Chambers, Fairfield, Forgie, Halpenny, Hellyer, Kennedy, Lambert, Parizeau, Roberge, Rogers, Smith (*Calgary South*), Webster and Winch.—13

*In attendance:* The Honourable George R. Pearkes, V.C., Minister of National Defence; Mr. E. B. Armstrong, Assistant Deputy Minister of National Defence (Finance); and Mr. D. B. Dwyer, Superintendent, Parliamentary Returns, Department of National Defence.

The Committee resumed from Tuesday, July 19th, its consideration of the 1960-61 Estimates of the Department of National Defence.

The Committee reverted to Item 217, General Administration, which had been initially considered on June 1st and had later been allowed to stand.

The Minister was questioned on matters arising from the consideration of the estimates of his department.

Mr. Winch made a statement of his views on the results of the deliberations of the Committee.

Mr. Hellyer also expressed his views on the results of the Committee's deliberations; and Mr. Chambers commented on the remarks of Messrs. Winch and Hellyer.

Item 217 was approved, on division, thereby concluding the Committee's consideration of the said estimates.

Mr. Hellyer expressed the Committee's appreciation to the Honourable George R. Pearkes and its respect for him.

At 4.35 o'clock p.m. the Committee adjourned until 9.30 o'clock a.m., Friday, July 22, 1960, when it is to meet *in camera*.

Eric H. Jones,  
*Acting Clerk of the Committee.*



## EVIDENCE

WEDNESDAY, July 20, 1960.  
3:30 p.m.

The CHAIRMAN: Gentlemen, we have a quorum. We are now at our last meeting. I asked each one of you if you would be good enough to send me any suggestions you might have as to items to be covered in the report. Could I have those please, gentlemen.

I think we have completed the Department of National Defence with the exception of the first item, that is, vote 217, Departmental Administration. There is a decrease of \$168,073 under 1959-60. Are there any further questions on item 217?

Mr. WINCH: I would like to say that it is utterly impossible to work sixteen hours a day in this House of Commons.

The CHAIRMAN: We all feel that way. That is why I would like to get this over with today.

Mr. WINCH: I am sorry I was not here when the meeting started.

The CHAIRMAN: I had said that we have completed estimates of National Defence with the exception of the item on Departmental Administration which is vote 217. The estimate this year is \$3,213,477 which is a reduction of \$168,073. You will recall it was agreed we would leave this item open, and then would come back to it. Are there any questions, or may the item carry?

Item 217 Departmental Administration . . . \$3,212,477

Mr. PARIZEAU: I hope my question is in order. I would like to ask a question dealing with the storage of the furniture of the members of the armed forces. For example, we have two warehouses in Chicoutimi. Could I find out what is the value of the furniture stored there, what is the cost of storing this furniture, and how long some of this furniture has been there?

The CHAIRMAN: Would you be satisfied if the minister or if his assistant deputy would give you that information later? I do not believe the answer is available right now.

Mr. PARIZEAU: Yes.

Mr. HELLYER: Would the minister give us his opinion of the priorities in respect of the various aspects of our defence expenditures? In other words does he consider the NATO contribution as the most important thing we are doing, or does he consider the North American defence the most important, or what priority would be established in respect of these various expenditures in our defence expenditures?

Hon. G. R. PEARKES (*Minister of National Defence*): I could not give you any degree of priority. I consider that all these expenditures are essential in order that we may carry out the government policy.

Mr. HELLYER: Is it not true that if you had only little resources available you would in fact have to decide between alternatives; you would have to say to yourself, in order to make a recommendation to the government that one particular aspect of your activity was more important than some other particular aspect? In that context I would like you to give us the benefit of your opinion.



Mr. PEARKES: I consider all these expenditures, including these estimates, are essential and are fully justified.

Mr. FAIRFIELD: Does the minister consider that it depends on the events and the current actions of possible enemies as to exactly what importance is attached to what defence estimates he will have before him in so far as NORAD or NATO is concerned? Does he consider these things will change just as the actions of our possible enemies change?

Mr. PEARKES: Certainly. It is a changing scene all the time. But at the present time in these present estimates I consider all the expenditures are essential for carrying out the government policy on defence.

Mr. WINCH: I would like to ask the minister this question. After all our meetings I find that I am now more completely confused than ever before, and now have no idea as to what is the government policy. Could I ask the minister if he can now—not on the general statement he has given us at our twenty-five or so meetings—give us a statement, a real statement, in view of the expenditures we are now being asked to pass in this committee as to what are the estimates—not “if and when or but”—but what are the estimates which are based on an understanding of our future commitments on conventional or thermo nuclear war?—Because I will admit quite honestly that I do not know now. As a result of the twenty-five meetings we have had in which the minister has given us a statement in which he has not given us any information whatever on the defence policy of Canada—

Mr. SMITH (*Calgary South*): Come, come, come!

Mr. LAMBERT: There are none so blind as those who will not see.

Mr. PEARKES: I am disappointed because I have honestly done my best during the twenty odd meetings of this committee to explain what is government policy and what is the defence policy. It cannot always be finalized at any particular moment. It is never black or white, and there are a great many shades of grey. It has to be that way because you are trying to arrange a system of defence to meet the plans which are being made by an enemy, not by a friend who will tell you exactly what he intends to do. I suggest to you we have a very definite defence policy and that we are doing our utmost to prevent a war breaking out. We believe we cannot do that by ourselves. We do not have enough resources to do that. Therefore, we have entered into certain agreements with other countries—the United Nations countries, the NATO countries, the United States in the Canada-United States region of NATO.

I am trying to think in order to convince you what I have to say. We believe we could not alone restrain an enemy from attacking us. Therefore, we enter into these collective agreements. If they are to be effective we must pay our fair share and do what we can within the limits of our resources of man-power and financial means. I believe that we are playing our part and that we are definitely contributing towards a deterrent which I hope will be effective so that war will never come. On the other hand, if that deterrent fails then we have to make preparations in order to survive under conditions which will exist in nuclear warfare. We are doing our best to take steps so that the nation can survive if attacked. I believe in order to carry out those purposes that it is necessary to have forces which are actually in being because we do not know when the attack is going to come. Therefore, we must be as ready as we can at all times.

Mr. WINCH: I understand this is our last opportunity of asking questions on policy. Do I understand, then, from what the minister has now said, that he still stands by his statement which he has made many times that maybe

a deterrent from war is the deterrent of being able to reply on a missile basis? On that basis Canada therefore is not in any position to be able to be a deterrent factor in the event of a war.

Mr. PEARKES: The security of the deterrent or retaliatory forces is an essential part of the deterrent.

Mr. WINCH: That is missile, is it not?

Mr. PEARKES: Not necessarily. I think everything we are doing is part of the deterrent. The fact that we have troops in Europe is part of the deterrent; the fact that we have an effective anti-submarine force at sea is part of the deterrent; the fact that we have an early warning system in this country and the fact that we are establishing Bomarc stations is all part of the deterrent. It will all go to make an enemy think twice as to what means he has to take to overcome those forces.

Mr. WINCH: May I ask one final question, because I want it very clear? I would like to ask the minister now, after all our twenty-five meetings, whether he thinks there will ever be an aggressive war which is not on a missile basis and if it is on a missile basis what is the defence of Canada?

Mr. PEARKES: I want to get that question clear. There seem to be two together.

Mr. WINCH: Will there ever be an aggressive war on the North American continent that is not an all-out aggressive attack by missile?

Mr. PEARKES: I can say definitely that if a war broke out within the next year or two the major attack forces would not be missile forces. It is my honest opinion that the Russians do not have at the present time sufficient missiles to rely entirely upon missiles to carry out an attack on this continent; but the time will come when that may change.

The CHAIRMAN: This is all evidence which you will find in the proceedings.

Mr. SMITH (*Calgary South*): I would like to ask the minister a question. I am getting a little tired of the opposition members after twenty-five meetings saying they are no further ahead. It is simply that they have made up their minds. We accept that there is an area of uncertainty in some of the problems and statements which have been presented to us. The uncertainty basically comes as a result of the continuing discussions and negotiations with the United States, through NORAD, or through our definite relationship with them generally. You have just concluded some meetings with the United States Defence Cabinet Committee. Obviously, you are not going to indicate the results of those meetings; the house is the proper place for that. I would ask you this, however: is there any way in which you can indicate anything more to the committee of the time-table of events wherein some of these unknowns will eventually be resolved? I think as an example there is the re-equipment and replacement of the CF-100, and the further assessment or determination in respect of the storing of nuclear equipment and weapons. Do we assume that this meeting you have just concluded is one of a series and that at any point from now on we can expect some announcement on these various subjects which have been brought up in this committee?

Mr. PEARKES: This meeting was one of a series of meetings. As the Secretary of State for External Affairs explained in the house it covered a very wide range of subjects, from those dealing with the international situation to matters of more detail concerning the supply of weapons and that sort of thing. When there is any matter which has been finalized and a statement could be made I am sure there will be announcements on that.

Mr. SMITH (*Calgary South*): May I ask this, then: are you closer towards a conclusion on some of these problems than you were prior to the meeting? Have you made progress at this last meeting?

Mr. PEARKES: I think very considerable progress was made at this last meeting.

Mr. SMITH (*Calgary South*): Then may we anticipate in the near future a decision being reached? I assume from that that in the near future—the immediate future—we can assume there will be some decision in respect of these problems.

Mr. PEARKES: I am not going to tie myself down to saying “in the immediate future”.

Mr. SMITH (*Calgary South*): The word “near future” is the word I used, Mr. Minister.

Mr. PEARKES: As soon as matters are finalized I am sure that statements will be made.

Mr. FAIRFIELD: In respect of Mr. Winch's first question about deterrent protection being a deterrent force, surely that is a broad word and there is not only the deterrent and the protection of the deterrent forces but also the ability of the nation to survive; for instance, the preparation of our people to be able to survive an attack is in itself a deterrent.

Mr. PEARKES: Certainly.

Mr. FAIRFIELD: To an attack?

Mr. PEARKES: Certainly. If we have the means of surviving under attack it will require a greater effort on the part of the attackers than if we had not the means of surviving.

Mr. FAIRFIELD: Do you consider that a nation which is prepared to survive a nuclear war would in effect be a deterrent to an attacking aggressive force?

Mr. PEARKES: Certainly. The enemy would have to put in a much greater effort into the attack to be able to overwhelm a people and a country than he would have if there was no preparation. That is why I feel these steps which are being taken now by the government for national survival are all part of the general deterrent, and I am very keen that we should go ahead with these steps. I am delighted with the progress which is being made by the army in that regard.

Mr. HELLYER: On this very point, and coming back to the matter of priorities, the minister stated that in his opinion an improved civil defence would be part and parcel of the deterrent. Is that correct?

Mr. PEARKES: I consider that efforts made to enable the nations to survive under nuclear attack are a part of the deterrent.

Mr. HELLYER: Then we are really in agreement that civil defence is a part of the area which would enable this nation to survive, and as such is part of the deterrent. If that is the case what priority does the minister give to this particular aspect so far as the expenditure of public funds is concerned?

Mr. PEARKES: I consider all these matters are of the utmost importance.

Mr. HELLYER: Let me ask this specific question. Five years from now, does the minister think—

Mr. WINCH: You won't even be here!

Mr. HELLYER: —one dollar spent in the meantime providing blast and fall-out shelters will protect a greater amount in respect of surviveability than would \$1 spent on air defence? In other words, will \$1 spent in this purpose of trying to protect part of our population in this manner actually save more people than would the same amount of money spent in interceptors or Bomarc missiles?

Mr. PEARKES: The one is complementary to the other. To say whether a dollar spent on civil defence is of more value than a dollar spent on inter-



ceptors is an impossible question to answer. I feel that both are essential. We have to have an active air defence and we have to have what you might call the passive defence of providing a protection for our people.

Mr. HELLYER: By the mid-nineteen-sixties the Russians can have, if they wish, sufficient offensive capacity to provide more than one bomber and/or one missile for each major target. Now, how effective will our air defence be against that type of offensive in the case of an all-out war?

The CHAIRMAN: I would think we would have to wait until five years time to see what our air defence is at that time.

Mr. HELLYER: That may be too late.

The CHAIRMAN: You know that question has been answered before.

Mr. PEARKES: All I can say is I hope that our deterrent will appear so effective to the Russians, and the power of our retaliation so overwhelming, that the Russians will realize that to drop one bomb on major cities of this country would be asking for complete annihilation of the Russian nation.

Mr. HELLYER: Does the minister think we should be doing more in respect of survival operations than we are?

Mr. PEARKES: I think we are making a great effort in survival operations now. I do not know that more money made available at this time could be effectively spent.

Mr. LAMBERT: May I put it this way? Is not a great part of the Canadian government policy to make sure that the Russians do not need one bomber or one missile for every target five years hence, and that they will feel they do not need any?

Mr. PEARKES: I sincerely hope that they will realize that one bomb on one major target would be futile and, being realistic people, I believe they will refrain from making any premeditated attack; but we always have to be alert to the possibility of a war starting up which is not a premeditated war but is by some misadventure.

Mr. FAIRFIELD: In Mr. Hellyer's statement he has tried to get the minister to compare the price of survival, of human lives, dollar for dollar, as against the total defence, and has asked what priority the minister would put on the survival of the lives of the population. Surely, it is just as important to protect our industries, our communications and our supply depots as to protect the people.

Mr. PEARKES: I feel all these things are vitally important.

Mr. FAIRFIELD: So that you cannot abandon one?

Mr. PEARKES: You cannot depend entirely upon one method. I do not think we can put all our resources into one particular form of defence, either survival, naval or any other.

Mr. ROGERS: To sum this up, there would be no sense in survival if you did not have retaliatory power?

Mr. PEARKES: I do not quite follow you.

Mr. ROGERS: What is the good of having all the money spent on survival if you do not have something to complement it and retaliate?

Mr. PEARKES: I do not think if we had all our money put into survival operations that that would be an adequate deterrent to the enemy attacking if he wanted to. It is the knowledge that there would be the retaliatory power of the west plus the fact that he will not be able to accomplish the complete annihilation of the nation because we have taken survival measures which will deter him in attacking.



Mr. SMITH (*Calgary South*): I rather gained the impression that attack is to be discouraged, of course, by a deterrent, and that we naturally expect survival operations to keep alive the population in Canada. I appreciate this, but I have not heard the reference today, which has been made repeatedly throughout these hearings, to the necessity of maintaining an adequate home defence. I would like to ask you, if there are any priorities, whether these priorities should be attached to the defence of this country in so far as the re-equipment of the air division of our squadrons in Canada is concerned.

The CHAIRMAN: It seems to me that the minister assessed importance to every part of the estimates that we have considered.

Mr. PEARKE: I am not quite certain what Mr. Smith is asking. He referred to the air division.

Mr. SMITH (*Calgary South*): In so far as the defence of a continent is concerned—and I am specifically referring now to the contribution of the air squadrons to NATO—I would like to hear from you, sir, whether or not you consider some probability of providing for replacement of the present CF-100 in our squadrons.

Mr. PEARKE: In Canada or in NATO?

Mr. SMITH (*Calgary South*): In Canada.

Mr. PEARKE: That matter is under consideration and no decision has yet been reached as to whether the CF-100's will be replaced.

The CHAIRMAN: Are there any further questions, gentlemen, or may the item carry?

Mr. WINCH: The first item?

The CHAIRMAN: Sure.

Mr. WINCH: That is to be carried now?

The CHAIRMAN: Are there any further questions before it does carry? Have you any other questions, Mr. Winch?

Mr. WINCH: It is not so much a question, but if you are going to put now whether the first item should carry, I would like to make a brief statement and then ask a question or two.

Mr. HELLYER: I have a few more questions before we get into the statement.

The CHAIRMAN: All right, Mr. Hellyer.

Mr. HELLYER: A few days ago there was a Canadian press story to the effect that the Department of National Defence had been asked to consider the reduction of defence forces and civil staff of the department. This rumour has been going around for some time, and I personally heard about it more than a month ago. The minister has told us, in previous testimony, that in his opinion our forces are now at the minimum level at which they could be and still do the tasks assigned to them effectively. I wonder if the minister could say where, in the event that cuts in the forces and civil staff are required, they could be made.

Mr. PEARKE: Within the department there are always examinations going on to see where economies can be effected; and, of course, that applies to the employment of personnel, be they military or civilian. We have been looking into the possibility of a reduction of some of our forces in order that within the amount of money which is likely to be made available to the department for the next year, more money could be allocated to equipment, to the provision of new equipment.

Mr. HELLYER: Can the minister say if, in his opinion, reductions could be effected in defence forces themselves, without reducing the number of functions they are presently called upon to carry out?

Mr. PEARKES: I have said, I think in this committee—and I have said it several times—that I do not believe any substantial reductions can be made in the number of personnel unless there is a reduction in the commitments that are given to the forces.

Mr. HELLYER: Then, Mr. Chairman, coming back to the question of priorities, which we were discussing a little earlier if the minister had to cut out some commitments—

The CHAIRMAN: We are getting "if-y" again.

Mr. HELLYER: We have had a lot of "if-y" answers.

The CHAIRMAN: We have had a lot of "if-y" questions.

Mr. HELLYER: If the minister has to reduce the commitments, which would he consider would be the most expendable?

Mr. FAIRFIELD: The committee!

The CHAIRMAN: He is not reducing any of the estimates we are concerned with now. These estimates are "as is" next year. If he is going to cut them, then, if we have the minister before us, we could ask him questions as to why he did cut them.

Mr. HELLYER: In view of this directive it may be the department has had pressure exerted on it not to spend all the money that we have voted for it. It is a consideration we have to take account of.

Mr. PEARKES: As I have stated before, earlier this afternoon, I believe all the money which is voted in these estimates is essential and is fully justified; and I could not accept a proposal to reduce the estimates in any respect this year.

Mr. HELLYER: Does the minister think with any reduction in the strength either of the armed forces or of the civilian staff, that the economies effected would be partly used for increases in salaries for those remaining?

Mr. PEARKES: As I have stated earlier, with regard to any increases which are authorized or have been authorized for the civil servants employed in this department, those increases are being taken care of by supplementary estimates from the Department of Finance.

The CHAIRMAN: Any further questions, gentlemen?

Mr. WINCH: It is not a question, sir. I do not agree, anyway at all, that any pressure, as far as I am concerned, has been exercised by the chairman of this committee or by the minister.

The CHAIRMAN: Mr. Winch, may we check to see if there are any further questions on the vote?

Mr. WINCH: That is the exact point I am coming to, sir. You have laid down a law that we cannot have a statement; but in view of the fact this is the last vote and the main vote—the administrative vote—I would ask your permission to express an opinion, and I will end it by moving a motion.

The CHAIRMAN: Is it a very long statement, Mr. Winch?

Mr. WINCH: We have met for some 25 or 26 meetings on this Defence Expenditures Committee. It had been my hope, Mr. Chairman, that as a result of our meetings there could have been arrived at an understanding of the defence policy—

The CHAIRMAN: Before you go ahead, Mr. Winch, I wonder if you would advise the committee how long this statement is; and then we can have the committee's wishes on it. I feel this way, if you are going to make a long statement—

Mr. WINCH: I am not, but I am going to make a statement before I vote on the passage of this main vote.

The CHAIRMAN: I wonder if you could get the permission of the committee. I am agreeable to listen to a statement for as long as you wish; but I want to check with the other members. Is it agreeable that Mr. Winch read his statement, gentlemen?

Mr. WINCH: I am not reading a statement; and I have not anything before me at all.

The CHAIRMAN: All right. Is it agreeable to you all that Mr. Winch make a statement?

Mr. LAMBERT: Is every other member of the committee going to be permitted to make a statement?

The CHAIRMAN: That is my point: if Mr. Winch does, everyone of you will be entitled to. What is your wish gentlemen?

Mr. SMITH (*Calgary South*): I would like to suggest, in any event, that we canvass the committee to make certain the purposes of the committee, that of asking questions, has been exhausted. It seems to me, if there are any more questions, then they should be asked.

The CHAIRMAN: This is the 27th sitting of this committee, and it seems to me we should be getting very close to the end; and I am wondering if there are any further questions on item 217? May I close the vote?

Mr. WINCH: No, because that means a vote on the estimate, and I am not prepared to do that without making a brief statement and moving a motion.

Mr. HELLYER: I have a few questions.

The CHAIRMAN: Yes, Mr. Hellyer?

Mr. HELLYER: At our last meeting yesterday we learned that one vote—I forget the number—involving a dollars item in the Department of National Defence in future commitments was in the amount of hundreds of millions of dollars, and in respect to a large part of these commitments the question of atomic warheads was related. In other words, a large proportion of the future commitments were relevant to the CF-104 and the Bomarc Sage system, and so on. In the event that satisfactory agreement with the United States on the control of nuclear warheads cannot be reached, then what will the position of the Canadian government be?

Mr. PEARKES: That is certainly a hypothetical question. It is the intention of the government, and steps are being taken, arrangements are being made, so that these warheads will be available, if and when they are required. It was so stated by the Prime Minister, and those arrangements are proceeding; and I have no reason to believe that when these warheads are required they will not be available.

Mr. HELLYER: If the United States government is not—

Mr. PEARKES: Or, if they are not available—

The CHAIRMAN: May we have quiet, gentlemen.

Mr. HELLYER: If the United States government was not able to give the Canadian government the control which it requires over these atomic warheads, is there any thought the Canadian government would, under any circumstances, make its own atomic devices in this country?

Mr. PEARKES: There are no plans for the Canadian government to make atomic warheads in this country. The policy has been stated over and over again in the house, that Canada is fundamentally opposed to the spread or the enlarging of the number of countries which are capable of making nuclear warheads.



Mr. HELLYER: Presumably, in the event we could not obtain satisfactory arrangements with respect to the storage and control of atomic warheads, we just would not be able to use the weapons or carriers which we have purchased for them; is that correct?

Mr. PEARKES: As I have said, I believe the arrangements are being carried out in a satisfactory manner, and that warheads will be available, if and when they are required.

Mr. HELLYER: Does the minister feel that fundamentally it is a good idea for a country to arm itself with weapons, for its own defence, presumably, which cannot be used except by the authorization of someone from a foreign country?

Mr. SMITH (*Calgary South*): That has been replied to already.

The CHAIRMAN: That has been given in evidence at least three times.

Mr. HELLYER: Not exactly in that form, and the minister may care to comment on it.

The CHAIRMAN: He might.

Mr. PEARKES: The Prime Minister has said, very definitely, that Canada will have control over the use of warheads which are going to be used, if they are required by Canadian launching vehicles.

Mr. HELLYER: But under the Interpretation Act what this means is that Canada would have joint control and would be able to use or not use them only after they had been released to us by authority of another country.

The CHAIRMAN: That too has been discussed and answered. We are just repeating ourselves, Mr. Hellyer. If there is anything further you wish to add, go ahead, Mr. Minister.

Mr. PEARKES: I do not know what more can be added to what the Prime Minister said on July 14 in the house, and he made it so clear then that there is no point in my repeating over and over again what has been said there.

Mr. HELLYER: The minister concurs that joint control of two countries over the weapons on Canadian soil would be satisfactory to the Canadian government?

Mr. WINCH: I am not interested in asking any more questions. I am going on the basis that you have now called for a vote on item 217 which is, of course, the major item, on the principle of acceptance of the defence estimates. I would appreciate your courtesy, just to allow me to say this—

Mr. PEARKES: May I finish with Mr. Hellyer's question? I think we ought to get this cleared up definitely. I refer to Hansard of July 14, and this is what the Prime Minister said in that connection:

These two elements together constitute joint control, and joint control is consistent with the view I expressed in the house on February 20, 1959, that it is important to limit the spread of nuclear weapons at the independent disposal of national governments.

Mr. HELLYER: That I understand.

Mr. PEARKES: I think it is impossible to add anything to that.

Mr. HELLYER: There is one other question which I posed earlier. That is, in the minister's opinion, in view of military history and problems created by joint control, does the minister feel it is fundamentally sound to arm the troops of our country with weapons which can only be used in our defence after they have been released to us by someone in a foreign country?

Mr. CHAMBERS: In other words, does the minister agree with the Prime Minister?

Mr. PEARKES: In these circumstances, I think the course we are taking is fundamentally sound, and the conditions, as have been outlined, will be entirely satisfactory to Canada.

The CHAIRMAN: Mr. Winch, please?

Mr. PEARKES: I am sorry to have interrupted, Mr. Chairman.

The CHAIRMAN: That is perfectly all right, Mr. Minister.

Mr. WINCH: I was most happy when this committee was first appointed, and I expected, as a result of our meetings, it would be possible to obtain a complete understanding of the defence policy of the government, the meaning of our expenditures and the application in the future.

I want to say, Mr. Chairman, that I am a most disappointed member of this committee. We are now told that we are in our 27th meeting. In 27 meetings it is my definite feeling that we have got nowhere at all. We have, sir, received a great deal of information, for which we are all very thankful. But when it came to an understanding of what was in the mind of the minister and the government, we received answers to the effect that it was "security," or "classified".

The major point, however, is this, that in our 27 meetings we have not yet been able to obtain from the minister—

Mr. LAMBERT: You are speaking in the singular?

Mr. WINCH: I am a cooperative chap by saying "we," but if you prefer it I will say "I," but I prefer to say "we."

But we have not been able to discover from the minister any definite indication at all as to the plan for the future regarding conventional war and conventional weapons or nuclear war and nuclear weapons or thermo-nuclear weapons; nor to my satisfaction—and I say "to my satisfaction," so that will satisfy my friend on the right—the expenditures of money running into millions of dollars which matter is now before us.

Mr. Chairman, to me this is a keen disappointment, not only because of what I have already said, but because of the fact upon which I cannot make too much comment, but I must mention that by the decision—I am afraid, of a political nature—that no one could be called as an expert except the Major-General—and I am going to use "major-general"—Pearkes, only he has appeared before us as a witness. That, sir, is one of the biggest disappointments of this committee, because I have never been in a committee yet where they have not been allowed. It was a decision of the committee.

The CHAIRMAN: In all fairness to the minister, I will just point out that at no time did he appear as a major-general or a private or corporal or sergeant, which he has been, all. He appeared as a witness, as the Minister of National Defence. Continue, Mr. Winch.

Mr. WINCH: But to me he is Major-General Pearkes, on a military expert basis, and I knew him when he was G.O.C., Western Command, and the most marvellous man in that position.

Several Hon. MEMBERS: Hear, hear.

Mr. WINCH: I think I was right in referring to him as an expert military witness, and not just as the Minister of National Defence—but Major-General Pearkes, V.C., if I may add that, too. We have got nothing at all as regards an understanding of the real policy and prognostics as to the future.

Mr. CHAMBERS: Can you lead a horse to water?

Mr. WINCH: So we are in a position where we have received certain information, very useful information, but we have heard only one military expert, and have been denied the right of having anybody else; and in reply to the real, pertinent questions the answer has been "classified" "security," "if" and "when." I maintain, sir, this committee was entitled to know more than "if" and "when."

Now I will bring this statement to a close very fast. This committee has the power of recommendation; it has not the power of decision. The decisions will be made in the House of Commons on the report of this committee and on the estimates. But because I, personally, am so frustrated, dissatisfied with no answers on a fundamental policy basis that mean anything, there is only one way in this committee that that frustration and dissatisfaction can be expressed.

Now I speak not from expediency or politics. The only way I can express my dissatisfaction in not having, after 27 meetings, here got an understanding from the minister, from the government, as to what is the defence policy of Canada, I move that this vote be reduced to the amount of \$1.

The CHAIRMAN: Any seconder, gentlemen?

Mr. Hellyer, would you like to make a statement now—I mean, a political statement? I think it is only fair. I have tried to be fair.

Mr. WINCH: All I am going to ask the chairman is this, if those who feel the same way as I do will second that motion.

The CHAIRMAN: I asked for a seconder, Mr. Winch.

Mr. SMITH (*Calgary South*): I do not think anyone would second it.

Mr. HELLYER: Mr. Chairman, you know I will not make a political statement, even if I have an opportunity to do so.

Mr. SMITH (*Calgary South*): Even if you had the capability to do so!

Mr. HELLYER: After the compliments I got yesterday, I am little surprised at that remark.

Mr. WINCH: I have no seconder?

The CHAIRMAN: No, you have no seconder, Mr. Winch.

Mr. HELLYER: Mr. Smith should be very genteel at the moment, because he demonstrated earlier his lack of knowledge of mathematics, when he asked, through you, if the minister felt today we were closer to decisions which have yet to be announced than we were at the time this committee commenced its sittings. If he had any knowledge of mathematics whatever he would know it would be impossible for it to be otherwise, presuming Professor Einstein is even close to the track.

Mr. SMITH (*Calgary South*): You have your slide rule out again, have you, Paul?

Mr. HELLYER: I think the policy is summed up—and I do not wish to be facetious now—but it was rather aptly summed up by the minister, I think, the first time we met, when, in referring to this committee and the policy of the Department of National Defence, he said, "We have nothing to hide." Some of us unfortunately feel that is too close to the truth to leave us any real comfort when we examine the state of the equipment that our armed forces presently have for their use, and the lack of immediate replacements for some of that equipment; and when we consider and are told that they are continuing consideration and negotiation going on in respect of important decisions—that does leave us with a feeling of real concern.

I think Mr. Winch's disillusionment is perfectly natural. I do not think I share it to the same extent, because I think I, perhaps, expected less of this committee than he apparently did. I never did expect we would get clear-cut statements on government policy and clear-cut solutions to the problems facing us, because I realized and still do that many of these decisions are still pending before the government, and that based on their performance to date in reaching conclusions and making decisions, it would be too much to hope that an announcement would be made while this committee was still sitting. I hope the



government will have further information for us, even by the time this committee reports back to the House of Commons, when the estimates are considered in the committee of the whole house.

I think there would be no point to be gained by those of us who support the official opposition seconding the motion that item 217 be reduced to \$1. It is true, as far as the vote of non-confidence is concerned, we would be in accord. Our position in respect to this will be made abundantly clear when the report of this committee is returned to the house and when the estimates of this department are considered by the committee of the whole house. We too have felt regret that the committee was not established sooner, that it did not, right at the outset, commence its deliberations in respect of current estimates. We were not permitted to hear outside experts for the purpose of either confirming the present policies or stating alternatives which would be available not only to us for consideration but also to the government itself. We think that this committee has been as noteworthy for what it has failed to do, if not more so, as for what it has accomplished.

For this reason we feel the most important thing now is for this committee to prepare a report and to return the estimates to the House of Commons, where they can be dealt with by the committee of the whole house.

Mr. WINCH: You should have the courage to second the motion. Put up or shut up. Face it now. If you will not face it now, you will not in the house.

Mr. HELLYER: I do not think that is necessarily true, Harold.

The CHAIRMAN: I take it you have completed your remarks, Mr. Hellyer. This committee started as a non-partisan committee, but it is ending up as a political one; so I think I should act more or less like the C.B.C.; I should give equal time to all parties.

Mr. Chambers, do you have something to say for the other party?

Mr. CHAMBERS: I would be the last one, indeed, to put this on a political level, but I do feel some response should be made to the statements that have been made by Mr. Winch and Mr. Hellyer.

First of all, to deal with Mr. Winch, I am glad to see he is in his usual good spirits. He says that he was unable to get an understanding of the policy of the government on defence in this committee. My comment would be that you can lead a horse to water but you cannot make it drink. We have had from the minister, it seems to me, a complete exposition of the policy of the government on defence. I think even Mr. Winch and Mr. Hellyer will agree that in the year of our Lord 1960 it is not an easy thing to have what might be called a foolproof defence policy.

There is a great deal of room for opinion. However, the policy of the government is a completely logical one, as outlined by the minister, and it has been completely explained. He said there have been cries of "security", and so on, but, to my memory, only once in our deliberations has a question been turned down on grounds of security—and that was a question in regard to research and development for new weapons and defence for the future.

Mr. WINCH: Well, you had better read the transcript again.

Mr. CHAMBERS: Well, I stand to be corrected, but this is the only one I can recall.

I think the members of the committee and the public who have followed it in the press, have a far greater understanding of the problems and policy of defence than when this committee started. And, in that connection, I think that we have performed a very useful function, and I personally would like to thank those members of the press who have kept before the public of this country the deliberations of the committee and, perhaps, helped the general public in their understanding of defence.

I cannot agree with the statement that the committee has been kept under tight rein by the chairman, or that we have not had a complete discussion, in the 27 meetings we have had.

The CHAIRMAN: Thank you, Mr. Chambers. May the item carry?

Some Hon. MEMBERS: Agreed.

Mr. WINCH: Against.

Item 217 agreed to.

Mr. HELLYER: Mr. Chairman, could I end the deliberations on a non-partisan note?

Mr. WINCH: Under what vote, Paul?

Mr. HELLYER: Under the terms of reference.

I hope I will not be considered out of order.

The CHAIRMAN: Well, we may have to give equal time to all the others.

Mr. HELLYER: I would be delighted.

There have been rumours that this is the last time the minister will appear before a defence committee of this house. Of course, I have no way of knowing whether or not the rumours are true but, in the event that they should be, and that the minister is slated for a new post of honour as Her Majesty's representative in his home province, I would like to take this opportunity of expressing our appreciation to him. He has not given us much of the information we would like to have had. In connection with many of his opinions, we did not agree. However, this does not diminish our personal feelings of respect for him as an individual. He has carried a heavy load through a difficult period. He has defended unpopular decisions stoutly, and many of these decisions, to my knowledge, have not been his personal ones, but those of his government. He has supported them as valiantly and enthusiastically as if they were his own, and this is in accordance with the best traditions of parliamentary government and cabinet solidarity. He has been courteous and patient while, at the same time, exhibiting a pleasant good humour. We do not know what the future holds, but we wish him health and happiness.

Mr. SMITH (*Calgary South*): That sounds like an obituary.

Mr. WINCH: Mr. Chairman, may I say I have not heard this rumour. I do not believe it. However, I have the same respect, individually, but not as minister. I believe I know the minister better than anybody else around this table because, when I was in the opposition, he was G.O.C., as I said before.

The CHAIRMAN: Thank you very much. You all are being very cooperative.

We have this room booked for 9.30 a.m. on Friday, and it will be an *in camera* meeting.

Mr. WINCH: How now do you intend to handle the drafting of the report?

The CHAIRMAN: I suggest that at the *in camera* meeting on Friday we begin to draft the report.

Mr. WINCH: In one day?

The CHAIRMAN: Well, if I may have your recommendations by tonight in regard to anything you wish included in it?

Mr. WINCH: You cannot do that; it is impossible. It is absolutely impossible. Your own member here, Mr. Lambert, says so.

The CHAIRMAN: This is not cut and dried.

Mr. WINCH: It is not possible.

Mr. HELLYER: Let us get at it, and show how speedy we can be.

JAN 1 1962



## ORDER OF REFERENCE

HOUSE OF COMMONS,  
SATURDAY, July 23, 1960.

*Ordered*,—That the names of Messrs. McIntosh, Macdonald (*Kings*) and Morton be substituted for those of Messrs. MacInnis, Rogers and Smith (*Calgary South*) respectively on the Special Committee on Defence Expenditures.

Attest

LÉON-J. RAYMOND,  
*Clerk of the House.*



## REPORTS TO THE HOUSE

FRIDAY, July 22, 1960.

The Special Committee on Defence Expenditures has the honour to present the following as its

### SECOND REPORT

1. The following Order of Reference, *inter alia*, was given to your Committee by the House on May 2, 1960, namely,

*Ordered*,—That Items numbered 66 to 74 inclusive, as listed in the Main Estimates of 1960-61, relating to the Department of Defence Production, be withdrawn from the Committee of Supply and referred to the Special Committee on Defence Expenditures, saving always the powers of the Committee of Supply in relation to the voting of public moneys.

2. Your Committee held two meetings considering the 1960-61 Estimates of the Department of Defence Production. During those deliberations your Committee heard a statement by the Minister and examined officials of his department.

3. Your Committee approves the said 1960-61 Estimates and commends them to the House.

4. A copy of the Committee's Minutes of Proceedings and Evidence respecting the above-mentioned estimates is appended hereto.

Respectfully submitted,

G. E. HALPENNY,  
*Chairman.*

FRIDAY, July 29, 1960.

The Special Committee on Defence Expenditures has the honour to present the following as its

### THIRD REPORT

1. The following Order of Reference, *inter alia*, was given to your Committee by the House on May 2, 1960, namely,

*Ordered*,—That Items numbered 217 to 237 inclusive, as listed in the Main Estimates of 1960-61, relating to the Department of National Defence, be withdrawn from the Committee of Supply and referred to the Special Committee of Defence Expenditures, saving always the powers of the Committee of Supply in relation to the voting of public moneys.

2. Your Committee decided that before it considered the Estimates of the Department of National Defence it would review the 1958-59 Expenditures of that department, as reported in the Public Accounts. During its consideration of the 1958-59 Expenditures and the 1960-61 Estimates of the department your Committee held 26 meetings.



3. During its deliberations your Committee heard statements from the Minister and examined officials of his department.

4. Your Committee approves the said 1960-61 Estimates and commends them to the House with the observations and recommendations set out below.

#### *NATO—NORAD*

5. The Committee discussed at some length Canada's international defence commitments which are based on the principle of collective security. In particular, it heard evidence concerning the provision of naval, air and ground forces to NATO and air forces to NORAD, and the provision of forces to support the United Nations Organization in the maintenance of peace. Your Committee supports these commitments as providing maximum security for the manpower and financial resources contributed. The Committee recommends a continued emphasis on the standardization of equipment and the co-ordination of research and development within NATO.

#### *Air Defence*

6. Your Committee noted that the bomber threat against the North American continent is substantial and the expectation that, during the next few years, it would continue to be so, although diminishing in scale. Provision has been made in the estimates to improve the defences against this threat through a joint program with the United States providing the Bomarc surface-to-air missile, strengthening and adding to the Pine Tree radar control system and providing SAGE electronic control and computing equipment. In view of the opinion expressed by the Minister that the period of effectiveness of the CF-100 is limited, the Committee hopes that an early decision can be taken as to the advisability of obtaining a replacement for this aircraft.

#### *Civil Defence Role*

7. Your Committee examined in detail the progress the Canadian Army has made in carrying out its assigned role in survival operations. Your Committee is of the opinion that further consideration should be given to the problem of co-ordination of the army's efforts with those of civilian defence workers. Also, there should be considered the question of the establishment of a straight line chain of authority in Civil Defence.

#### *Nuclear Defence Weapons*

8. The question of nuclear warheads was considered at some length by your Committee. It noted that certain defence weapons are being acquired which have nuclear capabilities. Some of these defence weapons, according to the present schedule, will be delivered commencing late in 1961. In his evidence to the Committee the Minister expressed the opinion that arrangements now being negotiated would make nuclear warheads available if and when required.

#### *Manpower*

9. Your Committee noted the Minister's conclusions that the present strength of the armed forces of Canada must be maintained if they are to fulfil the commitments assigned to them, and concurs in this view. It also encourages the continuing efforts to reduce civilian and administrative personnel to the most economic and efficient level, and notes the reduction from the 1956-57 figure of 54,371 to a current figure of 49,637.

*Integration and Recruiting of Services*

10. Your Committee is aware that certain steps have been taken by the three component parts of the armed forces to merge a limited number of parallel services, e.g., the dental and medical services. It feels that a more concerted effort should be made to extend this process. The Committee welcomed the Minister's assurance that studies are under way with a view to further reducing the costs of recruiting. It urges the Minister to intensify his efforts toward the establishment of a fully integrated recruiting system for the three services.

*New Equipment*

11. Your Committee noted that the proportion of budgetary allocations for the acquisition of equipment has been declining in relation to total defence allocation. The Committee recommends that a serious study of the implications of this trend be undertaken.

*Anti-submarine Defence*

12. The Committee heard evidence as to the substantial submarine threat and the possibility that some submarines may be capable of mounting missile attacks against this continent. Your Committee noted that substantial sums are provided in the estimates to improve the anti-submarine capability of the fleet and anti-submarine air arms of both the R.C.N. and R.C.A.F. Your Committee recommends intensive study of the advantages of acquiring submarines for anti-submarine operations which could also meet the peacetime training requirements of the R.C.N.

*Research and Development*

13. Your Committee observed that there has been some reduction in the budgetary allocation for research development. Your Committee believes that it is in the best interest of the growth of Canada's industrial and scientific strength actively to continue in the field of research development.

*Canadian Brigade in Europe*

14. Your Committee noted the Canadian Brigade Group in Europe had been provided with increased fire-power and that sufficient vehicles had been provided to transport all personnel of the brigade. The 762 mm. rocket and its launcher are being acquired and provision is made to complete the development of the Bobcat in the 1960-61 estimates. Also, consideration is being given to the provision of helicopters. The Committee supports these developments to maintain and improve the brigade's mobility and recommends that, if the development of the Bobcat is completed successfully, a decision be taken as soon as is practicable with respect to equipping the brigade with these vehicles and with helicopters.

*Allowances to Personnel Overseas*

15. While recognizing that the payment of family allowances is not the direct responsibility of the department, your Committee considers that further consideration should be given by the departments responsible with a view to removing financial discrimination suffered by any service personnel on overseas duty.

*Design and Development Personnel*

16. Your Committee examined the matter of the number of architects and engineers employed by the Department of National Defence for design and development purposes. It recommends that a careful examination be made to determine whether the use of such personnel for other than advisory and supervisory functions is of real value and more economic than the placing of greater reliance on independent consultants.

*Flying by Senior Officers*

17. The Committee noted with regret the loss to the service of the country of senior air officers due to accidents while flying. In the interests of continuity of command in the R.C.A.F., your Committee recommends that an investigation be made by the department into the whole question of flying by senior officers of the R.C.A.F.

18. A copy of the Committee's Minutes of Proceedings and Evidence respecting the above-mentioned estimates is appended hereto.

Respectfully submitted,

G. E. HALPENNY,  
*Chairman.*



## MINUTES OF PROCEEDINGS

HOUSE OF COMMONS, Room 238-S

FRIDAY, July 22, 1960

(28)

The Special Committee on Defence Expenditures met *in camera* at 9.30 o'clock a.m. this day. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Fairfield, Halpenny, Lambert, Parizeau, Roberge, Rogers, Smith (*Calgary South*), Webster and Winch—11.

The Committee proceeded to draft a Report to the House on its consideration of the 1960-61 Estimates of the Department of Defence Production.

Following debate the Committee agreed upon a Report and ordered that it be presented in the House.

The Committee further agreed that it would meet on Monday next to draft a Report to the House on its consideration of the 1960-61 Estimates of the Department of National Defence.

At 10.10 o'clock a.m. the Committee adjourned until 3.30 o'clock p.m. on Monday, July 25, 1960.

MONDAY, July 25, 1960

(29)

The Special Committee on Defence Expenditures met *in camera* at 3.30 o'clock p.m. this day. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Fairfield, Forgie, Halpenny, Hellyer, Kennedy, Lambert, Macdonald (*Kings*), McIntosh, Parizeau, Webster, and Winch—13.

The Committee proceeded to draft a Report to the House on the 1960-61 Estimates of the Department of National Defence. Various members of the Committee submitted suggestions for inclusion in the said Report. Following brief discussions thereon, the Chairman stated that the various submissions then received, and others which certain members had undertaken to give to him immediately, would be incorporated into a Draft Report which would be considered by the Committee at its next meeting.

At 4 o'clock p.m. the Committee adjourned until 2.30 o'clock p.m. on Wednesday next, July 27, 1960.

WEDNESDAY, July 27, 1960

(30)

The Special Committee on Defence Expenditures met *in camera* at 2.30 o'clock p.m. this day. The Chairman, Mr. G. E. Halpenny, presided.

*Members present:* Messrs. Carter, Chambers, Fairfield, Halpenny, Hellyer, Kennedy, Lambert, Macdonald (*Kings*), McIntosh, Morton, Parizeau, Roberge and Webster.—(13)

The Committee proceeded to consider the draft of a Report to the House which had been compiled by the Chairman from submissions made to him by members of the Committee.

The various items of the draft report were considered and, in some cases, revised.

The draft report presented by the Chairman, as amended, was adopted.

*Ordered*,—That the Chairman present the Report to the House on the 1960-61 Estimates of the Department of National Defence as it had been amended at this meeting.

The Committee agreed to the suggestion of the Chairman that there be recorded the thanks of the Committee to Mr. Antoine Chassé and Mr. Eric Jones who had served as Clerks of the Committee during this session, and to the stenographical and clerical staff of the Committee's branch who had provided very efficient service to the Committee in its consideration of the matters that had been referred to it. Therewith, there was coupled an expression of appreciation by the Committee to the Printing Bureau for its efficient and expeditious reproduction of the record of the Committee's proceedings of this session.

At 4.40 o'clock p.m. the Committee adjourned to the call of the Chair.

Eric H. Jones,  
*Clerk of the Committee.*

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